Clinical Lectures
ON
DISEASES OF THE URINARY ORGANS.

Delivered at University College Hospital.

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LECTURE I.

GENTLEMEN,—I propose to give a course of lectures on the Surgical Diseases of the Urinary Organs, and my object will be to afford you that information which will be most useful at the bedside. I shall not consider their anatomy or physiology, since that would make the course much too long. In the systematic lectures of the College it is impossible to communicate all those practical manœuvres, those little things which one arrives at, either in the way of diagnosis or treatment, which are so valuable in practice hereafter; neither is it possible that you should all acquire them at the bedside, since no hospital can furnish patients sufficient for the purpose; but you can learn a great deal by the conversational communications which are made here. It will be my aim to render available the result of experience which it has cost me years to acquire, and I shall do my best to communicate it to you in as many hours.

I have selected this course of clinical lectures on the Urinary Organs for two reasons. First, my ward always affords *groups* of these cases; you can always find there abundant material for consideration at the weekly clinical lecture. Secondly, because I do not know any set of diseases that are so successfully dealt with if you understand what you are about, or any in which you may make such dangerous mistakes if you are not well acquainted with them. Neither do I know any diseases in which you can afford so much relief to sufferin:, none in which a skilled hand can do so much for the patient, and none in which you can gain more credit for yourselves. It is therefore exceedingly important that you should be thoroughly acquainted with them.

I hope, in the course of ten or twelve lectures, to carry you through Part I. of the list of subjects before you.

I. DISEASES OF THE URINARY PASSAGES.

a. Diseases essentially inflammatory.

Urethritis, Prostatitis, Cystitis, } acute and chronic.

b. Diseases essentially obstructive.

Stricture of the urethra.
Hypertrophy of the prostate.

c. Calculous diseases.

Of the urethra.
Of the prostate.
Of the bladder.
Of the pelvis of the kidney.

d. Tumours—malignant and non-malignant.

Of the prostate.
Of the bladder.

II. DISEASES AFFECTING THE SECRETING ORGANS.

All organic changes in the kidney; also those altered conditions of the urine which depend on constitutional disease, such as Bright's disease and saccharine diabetes.

But before doing so, I shall get you to consider for a moment the title I have affixed to this course—viz., "The Surgical Diseases of the Urinary Organs." Now, you may ask, "What are the surgical diseases of the urinary organs, and what are not?" To my mind it is very easy to tell you what are surgical diseases of those organs, but not so easy to tell you what are not. Look at the list before you, and see where the line should be drawn. Certainly the first division belongs wholly to that class—all diseases of the urinary *passages*, excluding the kidneys, which we will assume to be secreting organs. Undoubtedly all that part belongs to the surgeon. The physician, conventionally, claims the second; but since it is impossible to make a diagnosis of any one of those diseases without well understanding the whole, and as the physician does not make a physical examination by means of an instrument, I am compelled to say that all affections of the urinary organs must fall under the care of the surgeon. This statement may not be universally acceptable; but if we consider the matter, we shall see that it is absolutely necessary for the diagnosis of urinary diseases to be able to pass a sound or catheter. I do not say that the physician is incapable of doing this; but, conventionally, it is not practised by him. And you can no more treat diseases of the urinary organs without the ability to use these instruments than you can treat diseases of the chest without understanding the use of the stethoscope.

The first step in our course is naturally that relating to Diagnosis. I say almost nothing about the pathology and treatment of any one of these diseases to-day. The question before us now is diagnosis, and you will understand this to be a most important thing in all diseases—to know accurately what you are about to treat: there is then little difficulty as to the treatment. Many books can tell you the one; no book can tell you the other. Diagnosis can only be accomplished by the application of certain rules after some practice. It is the first thing to learn and to use; it is the last thing to be perfectly acquired. Indeed, no man, let him live as long as he may, will ever be a perfect diagnostician. He may approach perfection; but if he is a diligent student, as he ought always to be, he will improve his powers of diagnosis as long as he lives. That is the reason why age or experience gives value to an opinion. It is long observation and extended experience that enable a man to arrive at diagnosis with greater certainty than the younger practitioner can possibly do.

Then we want to learn, not merely diagnosis, but the *art of making a rapid diagnosis*. When called to the bedside, your action must often depend on the first three or four minutes of your interview. It may be easy to go home quietly, think over the case, pull down the authorities, and say "I think the patient has so-and-so." That will not always do; it may do in some cases, and it had better do than that you should attempt to treat the case without having made up your mind as to the diagnosis. But that which will make you successful, that which distinguishes between the intelligent practitioner and him who is not so, is the ability to make a rapid as well as an accurate diagnosis of the case before him. Now, in calling your attention to this subject, I am afraid I cannot guarantee that you shall leave this theatre an hour hence first-rate diagnosticians of these diseases; but I can give you the method which, after a good deal of thought and experience, I have found best to answer the end proposed, and you can apply it afterwards for yourselves. First, you should pursue your diagnosis on a uniform plan—that is, you should adopt a uniform mode of interrogating each case of urinary disease. And what I say of this disease is applicable to most others. Your object is to collect *facts*, and your diagnosis consists of the *inference* which you draw from those facts. You will endeavour to arrive at the facts by the shortest possible route, and by the most accurate method. You should ask questions, make observations by the eye, by the hand, and by instruments, and then examine the secretions. Take them in that order: first, observation by questions; second, observation by the eye, by the hand, and by the instrument, which after all is but a long finger. You have no finger which is long enough to go down these narrow passages, and you lengthen it by means of your instrument. So with regard to the eye: your endoscope, whatever it may be worth (as to which I shall have something to say presently), is simply an increased ability to see.

First of all with regard to questions. You may make out most cases of urinary disease—say five out of six—by four simple questions, including the minor extensions which arise out of them. I always ask the patient these four questions, and in the following order. The first is, "Have you any, and if any what, frequency in passing water?" Then, as a branch of that question, springing out of it, I ask whether the frequency is more by day or by night, or influenced by any particular circumstances. How the question applies I will tell you afterwards. Then, secondly, I ask whether there is pain in passing urine, and whether *before*, or *after*, or *during* micturition; and whether at other times also, and if produced or aggravated by quick movements of the body. The locality of the pain is also to be ascertained. Then I ask as a third question,

"Is the character of the urine altered in appearance? Is it turbid or clear?" Possibly the patient will tell you that it is turbid; but you find, on questioning further, that it was passed perfectly clear, and only became thick after cooling or standing. The fourth and last question is—whether blood has passed in any way, whether it is florid or dark, whether passed at the end or at the beginning of making water, or whether independently of micturition altogether; and such-like supplementary inquiries. These are the four questions, and let me remark that the answers you get will depend very much upon the way in which you put the questions. The patient is not always self-possessed, or he does not clearly understand the nature of the question you put. It is necessary to be very precise and very distinct in your questions if you wish to get accurate answers. In fact, there is no such difficult thing in all experience, whether in our profession or out of it, as to arrive at facts; and let me remind you, again, that diagnosis consists of the acquisition of *facts*, and that it is impossible without them. Now you will say, how do I apply this to the list of diseases before you?

First, as to the frequency of passing water. There is no serious affection of the urinary organs, except one or two which I will name, in which you have not more or less frequency of passing water. For example: A man may have stricture to a considerable extent; the stream may be very narrow, and he may not for some years complain of frequency of passing water. I have classified these diseases, as you see, so that we may deal with them more easily. First of all, there are the inflammatory diseases—inflammation of the urethra, of the prostate, and of the bladder. In all these you have frequency in passing water. Not necessarily, however, in urethritis, until it reaches the distant part of the canal near the bladder. I do not propose to enter upon the subject of urethritis here, as you have frequent opportunities of studying it in the out-patient's room. I am now only referring to this symptom of frequency of passing water as existing more or less in all these three diseases at some time or another. In hypertrophy of the prostate you have it, and it is remarkable that it is more at night than in the day. In chronic prostatitis it is usually present to a small extent; in cystitis it is, of course, a characteristic symptom. In calculous diseases it is prominently met with, and generally its degree is in proportion to the amount of movement permitted to the patient. Tumours, of course, malignant and non-malignant, are attended by the same symptom. In pyelitis, and in almost all organic changes of the kidney, in Bright's disease, and in diabetes, there is frequency of making water. Whenever the natural characters of the urine are altered before it reaches the bladder, the secretion produces irritation. This fact is worth dwelling upon for a moment. Diluted or watery urine is often regarded as unirritating; on the contrary, it is not generally well retained by the bladder. The bladder is never so content as when it contains a urine of average, or more than average, specific gravity. Some persons, hysterical patients for example, will pass urine which is quite pale, almost like natural water, and the bladder is always more or less irritated by it. Of course in diabetes you have not only the character of the urine altered, but the quantity much increased.

The next question has reference to pain; and when you get answers as to the nature and seat of pain you will begin to see your way towards a diagnosis. In prostatitis there is usually pain at the end of passing water—less severe, but resembling somewhat that of stone; as the bladder contracts, when empty, on the tender prostate. In cystitis the pain is usually before micturition, because the inflamed bladder is sensitive on being distended, and is anxious to get rid of its contents. The pain is just above the pubes. When cystitis is acute, pain may be felt in the perineum also; but in chronic or subacute cystitis it is supra-pubic, and not at the end but at the beginning of making water, unless the prostate is affected, and then the tender prostate gives a little pain at the end.

In stricture of the urethra there is often pain about the seat of the obstruction, an idea of which you may obtain by a simple experiment. If, when passing urine with a full stream, you suddenly narrow the passage with your finger, so as to diminish the stream one-half or more, you will experience an acute pain.

There may be pain with hypertrophy of the prostate, inasmuch as this is frequently associated with chronic cystitis, when the pain is before making water, and not afterwards—differing in that respect from stone. The bladder wants to get rid of its contents, and can do so but slowly, on account of the enlarged prostate, which stands as a barrier in the way. During its first contractions, which expel but little urine, there is pain above the pubes and deep in the perineum; but when a third or a half of the contents has issued, the patient is relieved.

I shall not dwell upon calculous disease of the urethra. The calculus is only a temporary lodger there, and as it can often be felt externally by the hand there is rarely any difficulty about the diagnosis. Calculous disease of the prostate is also rare. I shall not complicate what I wish to be a simple matter by dwelling upon it, but call your attention to the commoner condition of calculus in the bladder. Here the pain is quite distinct in its character: it is felt at the end of passing water, because, the bladder being emptied, the rough surface of the stone is left in contact with the mucous membrane, doubtless that covering the neck of the bladder, which is unquestionably a sensitive spot. As soon as sufficient urine has trickled down into the bladder to separate the coats from the stone relief is obtained. Then the pain is felt at the end of the penis, within an inch of it, about the base of the glans. Furthermore, the pain is increased by movement; in other complaints it is not necessarily so. Put a patient in a rough-going vehicle, or make him jump from a step, or perform any rapid movement, and instantly he feels severe pain, probably at the neck of the bladder, but also at the end of the penis. In prostatitis, inasmuch as the neck of the bladder is involved, there is usually some pain at the end of the penis, which is a reason why chronic inflammation of the prostate produces symptoms much resembling those of stone.

With regard to calculus of the kidney, I have little to say about it here. Of course you have pain referred to the locality, right or left, not often to both kidneys; there is tenderness also, and much increase of pain on movement. It is usually on one side only, and perhaps more frequently on the left than on the right side.

One cannot, perhaps, say much about any characteristic pain in connexion with tumours. They may be situated in any part of the bladder; may obstruct the urine more or less, and accordingly as they produce cystitis and obstruct the flow of urine pain will be experienced.

The next question is as to the character of the urine itself. Now, suppose your patient has told you that he has frequency in passing water, pain at the end of the penis and at the neck of the bladder, and that the pain and frequency are aggravated by movement. You may begin to imagine, "Perhaps the man has stone in the bladder, and I shall have to sound him." Two questions only have already put this probability in your way, and you interrogate as to the character of the urine. See how this carries you a step further. We recommence our list as to this inquiry. A preliminary remark, however, about examining urine. I do not propose to teach you here a systematic mode of doing this. It is not in my department, and would only be repeating that which it will be your duty to learn elsewhere, and I hope you will do so thoroughly. But there is this hint which I may give with respect to it. Whenever you want a specimen from your patient to examine, do not tell him to send you a bottle of it passed in the usual way, or you will get a mixture of often doubtful value. What you require is the secretion of the kidneys, plus only anything there may be in the bladder; you do not want it complicated with anything which may come from the urethra. Let the man pass two or three tablespoonfuls through the urethra first, so as to sweep out whatever may be there, which may be put into a separate bottle, and then you will get a specimen—at any rate one of which you will know the source. You will have the renal secretion plus anything in the bladder. Suppose the man has gleet or chronic prostatitis: there will then be a quantity of muco-purulent matter in the urethra. If all this be carried into one vessel with the urine, how will you determine the different products, and decide by the microscope or by the eye what has come from the urethra, what from the prostate, and what from the kidneys? You cannot do it; but if you get rid of the source of error by flushing the urethra, so to speak, and emptying the contents into a separate glass—say a wineglass,—then taking the bulk or remainder in a tumbler, you will generally have a sample of urine that you can do something with. If I felt disposed to indulge you with gossip, I could tell you stories of the gravest blunders committed by not attending to that simple point. I can at all events tell you that I have more than once known a learned practitioner treat a patient for pyelitis who had nothing but a profuse discharge from the urethra; how the urine had been sent twice a week in a scrupulously clean bottle, and because a quantity of pus was found in it, the patient, who had some symptoms corroborating that view, was treated during some months for pyelitis; how a surgeon at length found out that

the whole of the matter came from the urethra, so that when the urethra was flushed into the first glass all the matter was there, and that the remaining urine was clear and healthy; and, finally, that the "pyelitis" soon disappeared under local treatment of the urethra. I do not know whether anyone else may tell you of that simple mode of determining this matter. I am always calling attention to it; and I will assume that in the future you will none of you make such a mistake as that I have mentioned.

Referring first to prostatitis, it is always associated more or less with shreds in the urine, which come from the prostatic part; and if you separate the urine as I have told you, you will find that the whole of the thick matter will be in the first glass, while that remains behind will be clear. How would it be with regard to calculus? You might have muco-pus in the first glass, but you would have more in the second from the bladder. Scarcely ever have you calculus in the bladder without having some muco-pus from the bladder itself. Occasionally, but very rarely, do I find a man with stone in the bladder having perfectly clear urine. Not commonly do I sound a man for stone who has clear urine, unless he has marked symptoms, because the presence of stone in the bladder almost always gives rise to a certain amount of cystitis, and there is deposit in consequence. If the patient passes shreds of thick matter in the first glass, and the urine left behind is clear, and has symptoms like those of stone, rely upon it he has chronic prostatitis.

The character of the urine in chronic cystitis is well known. There is at the bottom of the vessel a thick mucilaginous deposit, which does not issue in a stream, but falls out in a mass. In acute cystitis, the urine is cloudy, and there is a considerable deposit of pus. In stricture of the urethra, unless chronic cystitis has been set up, there is no deposit from the urine. Here the character of the stream is important. If, when the patient is passing urine, you see a very thin, small, spluttering stream, or urine issuing only in drops, you will know that there is an obstruction, most likely stricture; because, although in hypertrophy of the prostate you may have the stream much diminished, it will be a stream which falls downwards from the organ. In stricture, force may be brought to bear on the stream, so that, however small it may be, it is often fairly propelled; but in hypertrophy, in which the expelling apparatus is involved, the muscles cannot act, and therefore, however large or small the stream, it generally falls perpendicularly. In calculous disease of the bladder there is nothing to note about the nature of the stream. With regard to the débris of tumours found in the urine, the microscope sometimes, not often, throws light upon their nature. No doubt you may see cancer-cells in the urine, but it is most difficult to identify them. I have seen such cells declared to exist by good observers in cases in which cancer was not present. Young pavement epithelium is easily mistaken for them. Going upwards from the bladder, we may note pyelitis, more or less chronic—a disease in which the condition of the urine is only one symptom among many others which must be observed before arriving at a conclusion.

The next question is, "Do you pass blood?" and this will bring you very near indeed to an opinion on most cases—not quite, because in any case you may require to sound. In prostatitis there is often a little blood at the end of micturition, as in stone; in cystitis there is not necessarily blood, unless it is acute and far advanced; in stricture of the urethra there is not necessarily blood, and in hypertrophy of the prostate not necessarily. You may have it or not, often only as the result of instruments. It tells most in the question of stone. Just as in phthisis, a large proportion of patients have hæmoptysis at some time or another; so in about the same number of cases, say four out of five, there is some blood with vesical calculus.

I want you to pay particular attention to these questions, because they underlie much of what I shall have to say. What I have to add with regard to observation by the eye, by the hand, and by instruments, will come under each particular subject hereafter, and I will only briefly allude to it to-day. By the eye you observe mainly whether the bladder is distended or not, and you are assisted by palpation and percussion. You examine the perineum and scrotum also, with a view to extravasation of urine, perineal abscess and fistula, &c. And now we come to the question of instruments. Suppose such a case as that to which I have already referred, in which there is frequency of passing urine, pain at the end of micturition, pain on any considerable movement, thickening of the urine, blood passing occasionally, but more on movement, you regard it as highly probable that the man has stone. You cannot arrive at a certainty without instruments. You may have almost all these conditions in certain changes of the kidney and in renal calculus, and you cannot distinguish them unless you skilfully explore the bladder with a sound. When I claim great value for this instrument, quite understand that I am by no means desirous that in the case of every patient who comes to you and complains of some frequency in making water, or pain in the act, you should say "Lie down and let me pass an instrument." Perhaps the surgeon may be apt to abuse a little his power of passing instruments; it should never be done unless it is absolutely necessary. I hold that an instrument, *per se*, is an evil—a very small one or a considerable one, according to the manner in which it is employed,—and is never to be used unless there is good reason to believe that a greater evil is present which it may mitigate or cure. But when your patient has the symptoms named, you will be doing him an injury unless you resort to it. In cases of stricture the instrument is also necessary; and so in ascertaining the condition of the bladder, whether it is full or empty. A man may make water very frequently, strain hard, and be very certain that he has emptied the bladder, and be quite deceived. How can you tell? There may be a tumour simulating a distended bladder. You cannot know whether the bladder is emptied unless you pass an instrument. Many a man has had an instrument passed into the bladder, and a quart of urine has been found to be left behind, when his own sensations led him to believe that he had expelled every drop. We shall see more of this when we come to the question of retention and hypertrophy of the prostate.

As we are now on the question of diagnosis, I take the opportunity of showing you that the eye may be assisted to a certain extent by what is called the endoscope, which is simply an instrument that we have long been in the habit of passing into all the cavities of the body—the ear, the vagina, the rectum—for the purpose of bringing reflected light to bear upon the interior of those cavities. For some years it has been attempted to do the same with the urethra. It is sixteen years ago since I first saw the endoscope applied to the urethra. This was in the hands of Mr. Avery, of the Charing-cross Hospital. As I was turning my attention somewhat to this subject, he asked me to see some of his patients, and a new instrument he was then making. He showed me a long tube, precisely similar to this which I hold in my hand, with certain arrangements enabling one to see deep portions of the urethra. He showed me cases of stricture, but I do not think he looked into the bladder. He paid a great deal of attention to the subject, and the instrument was brought by him to a certain state of perfection; unhappily, however, his death occurred shortly afterwards, and the thing was lost sight of here. Various attempts have been made with the same object, long before and since, but I do not know that there is anything on this table very superior to what Mr. Avery showed. Within the last few years M. Desormeaux, of Paris, has paid great attention to the endoscope, and has perfected one of his own, consisting of a similar tube, but with different appliances. The various modes in which light is applied constitute the differences between the various kinds of endoscope. In all of them there is a tube of this description to pass into the cavity. Five years ago I had an endoscope of M. Desormeaux's, and exhibited it in the hospital—the instrument which you see here. Dr. Cruise, of Dublin, has brought it to greater perfection, and has produced a better instrument than we heretofore possessed. I may tell you at once, that if a man has a good and a tolerably practised hand, with a fair share of intelligence, I do not think he will gain a great deal by the endoscope; and if he has not, I think it will be of no use at all. There are some few cases in which he may find it of value; but do not expect that the endoscope is going to work any marvels in the diagnosis of surgical diseases of the urinary organs. In nineteen cases out of twenty you ought to be able to arrive at the necessary information without it. And it is not the easiest thing in the world to apply. As already remarked, a man should not be put unnecessarily to the pain and inconvenience of a sound or a catheter; but examination by the endoscope is a somewhat more irritating and tedious process. In certain exceptional cases, in which you are unable to arrive at a conclusion without it, you may employ it to some advantage. This patient before you had an exceedingly bad stricture of the urethra, which I cut internally last Tuesday week. He is now perfectly well. He could not pass a drop of urine before the operation, but now he is able to pass it naturally; and you will agree with me that a great deal must have been done last Wednesday week to make that change. I cut through the strictures deeply, and now we shall see whether we can find

the cicatrices. I shall use Desormeaux's endoscope, illuminated by Dr. Cruise's lamp.—You see we have now made a careful and prolonged examination. The urethra is of a more dusky red about the part which has been affected, but that is all which can be observed. Changes in the colour and texture of the mucous membrane of the urethra and bladder are those which are most easily seen, and which are of the most importance to note. The orifice of a stricture may be sometimes seen, but the result is without practical utility. A stone in the bladder may be easily seen, or rather the small portion of it upon which the end of the sound impinges; but I have never gained anything by the sight. A calculus smaller than a pea may be easily found by delicate sounding—an audible note elicited from it; more easily than you can see it through the endoscopic sound. I may mention that no one has yet been able by its means to identify the verumontanum, and if you cannot see the verumontanum I think it is quite possible that minute pathological changes will often escape you.

Mr. Baker has been good enough to send up another and very simple endoscope, designed by Mr. Warwick, for exhibition. It may be used with ordinary gaslight or with sunlight. It certainly seems, on comparison, to effect nearly as much as the larger and more elaborate instrument.

THE SANITARY HISTORY OF THE BRITISH ARMY IN INDIA, PAST AND PRESENT.

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No. II.

Health-history of the British Army in India, 1800–1856.

I PROPOSE here to offer, for the consideration of medical officers serving in the East Indies, some of the important results arrived at by the Royal Commissioners* appointed in May, 1859, "to inquire, firstly, into the rate of sickness and mortality, and invaliding, among our troops, both of the general and Indian armies, in all the stations throughout India and its dependencies, and into the class of diseases from which such sickness and mortality arise." And, further, as to "the causes of sickness and mortality, whether as relates to climate, locality, state of barracks, drainage, water-supply, diet, drink, dress, duties, or habits of the troops." Further, the Commissioners were ordered by the Queen to inquire "what existing stations are unhealthy, and to indicate how such unhealthiness may be removed, if possible, and the nature of the sanitary improvements required; the subject of healthy positions generally, with the view of recommending the most healthy for future occupation, and of ascertaining whether healthy stations may not be found within moderate distance of such unhealthy stations as may be of political or military importance."

The last of those higher subjects ordered for investigation by the Commission was the most important of all—viz., "the general subject of sanitaria and hill stations, with the view of pointing out the most healthy positions on them." Supplementary to these cardinal subjects, we were ordered to inquire in detail into—

1. "The best construction of barracks and hospitals, huts and tents, for India.
2. "The present regulations or practice for preserving the health of the troops, and enforcing medical and sanitary police.
3. "The organisation of the army sanitary service.
4. "The practicability of establishing a general system of military statistics throughout India, and to ascertain whether any and what means exist of comparing the diseases and mortality of the troops with those of the civil population, British and native.
5. "And we do further command and require you to report what changes you may consider it expedient to make in the present practice, with respect to any of the subjects above mentioned."

6. The questions ordered by her Majesty to be examined and reported on occupied the Commissioners from May, 1859, to the same month in 1863; thus their labours extended over four years, and were conducted alike in India and at home.

7. How the duty has been performed it would not become me to say; but the first of British medical periodicals has declared that "From the very wide extent and varied nature of the field of inquiry, as well as from the comprehensive and searching system of investigation pursued, and the highly intelligent character of the testimony received, whether orally or in writing, an amount of valuable information on many of the most important subjects relating to public health is collected together, such as has never before been obtained. The appearance of this Report, with its documentary evidence, will form an era in the literature of State Medicine and of hygiene, not of armies and military establishments only, but of communities and peoples also."*

8. However this may be, the history of British military health, as presented in the Report of the Royal Commission, must long remain an important subject of reference, and a warning, to the army surgeon, wherever serving.

9. The task of maintaining the British army in India is not light, and can only be achieved in field and cantonment by the most sedulous vigilance, in combination with scientific and administrative ability of the highest order; something in its accomplishment always depending on the officers and men themselves. The Royal Commission collected evidence, analysed observations, and embodied the recommendations in their Report, of the most eminent Indian and other authorities, including two members of the then Government of India.

10. The Government knows that, even in war, efficiency in the field is the supreme test of an army's sanitary organisation. This fact was proved, to the credit of the Indian Government, in the Affghan, the Sikh, and the last China wars, and to its great discredit in the first Burmese and first China wars.

11. But it is necessary to look back to the past of the British army in India, and the following are some of the results presented by the Commissioners:—

Mortality.

12. To render medical statistics available for comparison or other useful purposes, two conditions are always necessary—a wide range of observation in years, and large masses of men. These two indispensable advantages, sufficiently long to furnish just averages, were freely available by the Royal Commission—first, towards obtaining the most important information, and, eventually, for securing to the British soldier in India the most beneficent results.

13. The Report of the Commission discusses, generally, the sanitary question as regards the whole of India, its sickness, mortality, invaliding, &c., during fifty-seven years. Information on these points was sought for down to the latest dates, but nothing was found at the India Office later than 1856.

14. The mortality, deduced from the latest War Office returns which Sir Alexander Tulloch could give in, closely agreed with the mortality deduced by the Commission from still better materials—the Nominal Returns of the Company's European troops. By the one the mortality of British troops in India was 70, by the other 69, in 1000.

15. The soldiers who were invalided from the Royal army and from the Company's forces included many who suffered under slow fatal diseases, such as chronic diseases, the results of fevers and dysenteries, which were contracted on service. The Commission did not bring them into account; yet the returns showed that, while the annual deaths during fifty-seven years were, for all India, at the average rate of 69 in 1000, the other casualties were 82 in 1000; making the total casualties from all causes, including invaliding and discharges, 151 in 1000. The Commission brought only 69 per 1000 into prominent and immediate account.

16. The question of the effects of war was discussed in a separate chapter, and it was shown that the years of war were those in which the mortality was generally highest, but that the greatest part of this mortality was the direct effect of fevers, dysenteries, cholera, &c., leaving but a small proportion as resulting from deaths in battle and from wounds.

17. It is evident that the mortality of an army in war cannot be omitted in any investigation of the general mortality to which it is liable; and it is in war chiefly that the deficiency of sanitary arrangements is seen. Thus, as it would not be right to leave out the years of the Crimean war in investigating the aggregate mortality of the British army, neither could the Commission exclude the years of war in India from their survey.

* The Report to the Queen is mainly quoted; but the letter of Lord Stanley to Sir Charles Wood, and that by the Sanitary Commission, War Office, to the same address, have also been referred to.

* British and Foreign Medico-Chirurgical Review, Jan. 1864.

18. The Commission did not include the years of the Persian war or of the mutiny; for, imperfect as the returns in their possession were, the returns of the commanding officers of regiments, published in detail in the folio report, convinced the Commission that, had the returns been brought down to the latest period, the rate of mortality would not have been lowered by that operation. But in any case the Commission would not have been justified in basing its calculations upon a future of unbroken peace in Asia.

19. That the rate of mortality would not have been lessened in the Report by including the latest period is evident in a published table, by which it appears that the deaths in Persia were in the military year ending April 1st, 1857—

64th	Regiment	237	men
70th	,, ...	117	,,
60th	,, 1st Batt.	194	,,
81st	,, ...	170	,,

And other regiments lost greater numbers. In the following year twelve regiments lost—

105	384	223	280	128	175
107	106	228	284	140	121,

out of strengths often below 1000 at the beginning of the year.

In the military year following (1859) seventeen regiments lost in India—

116	187	107	104	120	123
118	113	141	176	123	139
112	112	165	141	148	

And of other regiments the losses were very heavy.

After the war, the invalids and disabled, many of whom died, were sent home in large numbers, and thus reduced the deaths in India during the following years; meanwhile, the mortality of the above regiments during the four years 1857–60 was at the rate of 77 in 1000.

20. These regimental returns will be of use to the future historian of the war of the mutiny; but the Commission, desiring to avoid anything like over-statement of the case, did not bring the mortality of any regiment during the years 1857, '8, and '9 into account.

21. The reduced mortality which has come to light since the inquiries of the Commission commenced, is cited by a certain class of writers to prove that the Commission, in their Report, overstated the deplorable mortality which prevailed during the present century, down to the year of the mutiny. Other critics, by excluding years of war, as well as even deaths from cholera, and selecting years after war had cleared the army of its invalids, contrived to exhibit low rates of mortality, but now have impeached the accuracy of the calculations of the Commissioners. The mortality which the Commission cites is indeed an incontestable fact.

22. The suggestions of one writer that, to reduce the mortality of the army in India the sole course is to avoid war in future, requires no comment or discussion.

23. With regard to recent lower death-rates, it is necessary to bear in mind that numerical records made for short periods (still more for a single year) are usually either in excess or in deficiency; and no general law, either as regards sickness or mortality, can be deduced from them. By selecting particular years, all the stations, even on the West Coast of Africa, might be shown to be among the healthiest places in our foreign possessions.

24. It is always possible, by selecting years, short periods, and localities skilfully, to prove that the mortality of the troops in a great country is either high or low; but averages deduced from short periods can never be just. The Commission was well aware of this, and, to avoid all such misleading fallacies, based their estimates on returns during a long series of fifty-seven years, displaying, however, the facts for each year and for each Presidency. The Commission not only described the mortality of each Presidency separately, but, as far as was practicable, of each station, each regiment, and each arm of the service.

25. So far as the Commission could discern, there was less disposition among Indian authorities to believe that the mortality of European troops had been high, particularly during active service, than to admit that the mortality could possibly be reduced below the past standard; it was all the fault of the burning, implacable sun, according to popular belief. The Commission addressed itself, therefore, especially to this branch of the inquiry, and proved—

a. That in several of the hottest stations in India the mortality had been as low as 30 and 20 in 1000 during a series of years.

b. That the mortality was everywhere mainly due to certain diseases which are the result of various excremental organic compounds and marsh malaria, producing the same class of diseases in Europe.

c. That the mortality of the population from the same class of diseases was formerly higher in London than it is now in Calcutta.

d. That the dietary, regimen, barracks, sanitary arrangements, particularly in the field, had been inconceivably defective during a long series of years.

e. That the native cities and bazaars of India were in a deplorable sanitary condition; that they were centres of disease, but that the native troops lost less than 20 per 1000 by death.

f. That the military officers of the Company died at the rate of 31 in 1000, while the civil servants exposed to the same climate died at the rate of 20 in 1000.

26. All this seemed to show that if British soldiers died at the rate of 69, or even 50 per 1000 annually, it was not the uncontrollable "climate" that killed them.

27. From these and other elaborate inquiries, the Commission concluded that the "climate" of India includes various elements, and that the mortality of our army and of the European race is due chiefly to those elements which are, to a large extent, under control. The diet and clothing of the men could be improved; the excessive doses of poisonous spirits under a burning sun could be commuted into other drinks; the mind of the soldier could be occupied; troops could be transferred from stations irreclaimably bad to stations proved by experience to be comparatively salubrious, and susceptible of being rendered more salubrious still. The same sanitary measures, too, as had driven plague from Europe, and mitigated malarious fevers, must, it was inferred, produce the same salutary effects in Bombay, Madras, and Calcutta, and in other cities of India.

28. The first great fact which struck the Royal Commission forcibly was this: The civil servants of the Company at the soldier's age did not die at a rate higher than 20 in 1000; and as they are distributed over all the country, it follows that the climate of India is not necessarily fatal to any higher proportion.

29. The mortality of the military officers who were stationed with the British and native troops all over India had been as high as 38; but it had been less by 31 than the mortality of the European soldiers. The mortality of British soldiers at many stations did not exceed 20 per 1000, and half of this was by diseases resulting from defective sanitary arrangements. The mortality of the native troops did not exceed 20 in 1000 under many unfavourable conditions, and the mortality of Indian cities was not higher apparently than that of European cities in the same unhealthy condition.

30. In the seventeenth century London, chiefly in the summer and autumn, suffered from the same diseases as Calcutta—fever, dysentery, cholera, the plague occasionally in addition.

31. Referring now more especially to the Report, I proceed to show what has been the rate of mortality, and the effect of this on the efficiency and on the cost of the British army in India.

32. The medical reports, special investigations of the casualty-rolls which I have had made, and a great variety of returns, supply the materials for determining the mortality of the European non-commissioned officers and men in the various arms and in the three Presidencies.

33. In the spirit of providence, the civil and military officers of the late Company established funds for the sustenance of widows and orphans; but generally without sufficient data: hence it has been necessary to submit their experience to the investigation of several actuaries in London, who have at various periods reported on the mortality of Indian civil servants, of military officers, of wives, widows and children. From another source we are able to follow the Indian officer home, and to determine his lifetime after passing through the perils of India. With the non-commissioned officers and men we can now, for the first time, deal in the same way.

34. The variations of the rate of mortality among men depend on two great classes of causes: the first class inherent in the organisation itself; the second external.

35. Sex, and perhaps race, as well as age, are other inherent elements affecting the rate of mortality. Each age and sex is subject to a mortality which may be called natural in the present state of mankind; but that natural mortality is everywhere augmented by bad habits and unfavourable conditions. The natural standard is therefore undetermined; but the ascertained rates of mortality actually prevailing among large bodies

of men will serve temporarily all the practical purposes of the exact natural standard.

36. Now the mortality of men of the soldier's age in the healthy parts of England and Wales is such that, on an average, 8 die annually in 1000 living.

37. Recruits for India undergo careful examination; and when soldiers are attacked with consumption, or any disease that is not soon fatal, they are invalided. Thus their recorded mortality in peace, under such conditions as can be commanded for the army at home, should not exceed that experienced in the healthy districts of England, which, as regards their salubrity, are by no means perfect models.

38. Half the population of England and Wales is concentrated in town and city parishes, under many unfavourable conditions; and the annual mortality of Englishmen of the soldier's age is 9 in 1000.

39. The mortality of men of the same age in the unhealthiest towns of England, and in the unhealthiest trades, is at the rate of 12 per 1000.

40. Thus the mortality varies in different cases; and as it rises from 8 to 9 and 12, unfavourable sanitary conditions are discovered accounting for every degree of increase. The same principle holds in the mortality of the British army at home, which was at the rate of 17 per 1000 annually, and is now declining in proportion as the causes of disease are abolished or mitigated.

41. The mortality of non-commissioned officers and men serving in the British army abroad in the four years 1857–60 was at the rate of 41 per 1000; of the officers, the mortality was 30 in 1000.

42. The annual mortality of officers serving at home and abroad was 17, of non-commissioned officers and men 33 in 1000, during the years 1839–53 of European peace. Sir Alex. Tulloch gave, in his evidence, a series of War-office returns of the strength, deaths, and mortality of the Royal army in India during thirty-nine years, 1817–55; from which it appears that the mean strength in the three Presidencies was 20,332, and the registered deaths 55,584: so the annual rate of mortality was 70 per 1000. The Mahratta, Pindaree, Burmese, Affghan, Sindh, Sutlej, Punjab, and Chinese campaigns account, according to his estimate, for 10 out of the 70 deaths.

43. The difficulties of obtaining results at once exact and precise were enormous; and the medical returns for some time appear to have included only the deaths in hospitals. The Commission therefore selected for analysis the Nominal Rolls of strength and casualties at the India House relating to the late Company's European troops.

44. The collection of annual Casualty Rolls at the India House was "compiled upon the principle of accounting for every man becoming ineffective in the year." Verified by the signatures of commanding officers and adjutants of corps, the rolls are perfectly intelligible and substantially correct; they have therefore been analysed elaborately for the purposes of this inquiry.

45. The European troops of the Company, unlike the Royal army, served in India only, where they remained until death, or until they returned home. The deaths in the fifty-seven years, 1800–56, amongst all the Company's non-commissioned officers and men, including invalids in India, amounted to 40,420, out of an aggregate of 588,820 years of life, obtained by adding up the average annual strength in those years; so, the annual rate of mortality has been 69 in 1000 during the present century, up to 1856.

46. The rate of mortality was as high as 134 in 1804 in the first Mahratta war, and it was as low as 41 in 1852. It was high, again, in the years of the mutiny, and it has been subsequently lower than the Indian standard. From the rate 55 in 1770–99, the rate rose to 85 in the 30 years 1800–29; and the mortality fell to 58 in the 27 years 1830–56; so that the death-rate of the British soldier since the first occupation of the country down to 1856 has oscillated round 69 per 1000.

47. If the mortality is set down at 69 in 1000, it follows that, besides deaths by natural causes, 61, or, taking the English standard, 60 per 1000 of our troops perished in India annually. It is at that expense that we held dominion there for a century; a company out of every regiment was sacrificed every twenty months. These companies faded away in the prime of life, leaving but few children; and they were replaced at a great cost by successive shiploads of recruits.

48. The last accessible returns, and the experience of the mutiny, were in strict conformity with the statements of the Commission. With a strength of 30,662 British soldiers, who sufficed for all purposes, England lost for years 2134, or 69 per 1000 men annually by death; but, from the returns of 1861, it appeared that there were then in India 75,759 men, including non-commissioned officers, besides 8324 commissioned officers. The proposed European establishment was to comprise 73,000 men, or a third part of the British army, of whom, at the rate of 69 per 1000, the loss by death would be 5037 annually. This was the prospect had matters remained as they were up to 1856.

49. The sick in hospital by one estimate would be 7300; by another, 6132. This was an alarming prospect to the country, and distressing, inasmuch as the deaths out of the same number of men at the soldier's age is only 657, or at the rate of 9 per 1000. Instead of losing 657 lives annually, there was a well-grounded fear that, should years of war, and cholera, and fever, and dysentery, and liver disease recur as they had in past times, England might be called upon to supply the places of 5037 dead soldiers by 5037 recruits. This it was felt would, in addition to other casualties, be an undue strain upon the military resources of the country.

Invaliding.

1. In addition to the heavy losses by death during the mutiny, there was great loss by invaliding of 81, 74, and 60 per 1000 in the three years of 1860–62 following upon it.

2. The soldiers who were invalided from the Royal army and from the Company's force included many who laboured under slow fatal diseases, such as chronic dysentery, and other diseases which were contracted in the service. The Commission did not bring them into account. Yet the returns showed that, while the annual deaths during fifty-seven years was at the average rate of 69 in 1000, the other casualties were 82 in 1000; making a total of "casualties" from all causes, including invaliding and discharges, of 151 in 1000. The Commissioners only brought 69 per 1000 into prominent account.

3. The change from long periods of service to the short limit of ten years in the general army has tended, of late years, to reduce the apparent rate of mortality in India, inasmuch as unhealthy men are got rid of when their term of service expires, and only the healthy, well-behaved, seasoned soldier remains, if he chooses to volunteer for a further term.

4. Sir Alexander Tulloch, who estimated the annual mortality of the Royal army at 70 deaths in 1000, referred 10 to casualties in the field; and the Commission was of opinion that more than 10 out of the 82 men discharged for other casualties, including chronic maladies, would die of diseases induced by India.

P.S.—I may here observe, in reference to medical statistics generally, but especially to allegations occasionally made as to exaggerations in reckoning mortality in armies, that my friend, the late Major-General Sir Alexander Tulloch, K.C.B., often stated to me, as the result of his unequalled experiences in the preparation of his great work on the medical statistics of the British army over thirty years, and comprising a review of the health-history of more than a hundred thousand men, that any investigation such as that conducted by the Royal Commission of 1857, by whomsoever carried out, must necessarily eventuate in an under-statement of mortality; inasmuch as a certain number of deaths occur annually in an army—especially when scattered abroad in the manner of the military forces of this country—which cannot be traced. More or less of this kind of inaccuracy—the very reverse of exaggeration—must, indeed, attach to all such examinations and reports.

ON

LITHOTOMY BY A SEMILUNAR EXTERNAL INCISION.

BY JOHN E. ERICHSEN, F.R.C.S.,
SENIOR SURGEON OF UNIVERSITY COLLEGE HOSPITAL, AND HOLME PROFESSOR OF CLINICAL SURGERY.

SIR W. FERGUSSON, in the very interesting and valuable lecture on the above subject, published in the last number of THE LANCET, has broached several questions of great practical importance. It is not my object to enter into a discussion of these, for in the main I agree with all that has been written by that distinguished surgeon on the subject. But as I removed last summer a large calculus through the semilunar external incision, I have thought that a record of that case might not be an uninteresting addition to the remarks that have appeared in this journal on that subject. Like Sir William, although

practising, as a rule, lateral lithotomy by Cheselden's method, as modified by Liston, I have for a long time had grave doubts whether it was really the best way of getting into the bladder, and more especially of extracting a large stone out of it.

These doubts led me to determine to adopt the Transverse Bilateral method in the first favourable case that presented itself, and which was as follows:—

A. G——, sixty-seven years of age, was sent to me at University College Hospital by Mr. Willing, of Great Wakering, Essex. He had suffered from symptoms of stone in the bladder for three years, and had much muco-pus in the urine. The report from the case-book is as follows:—

Aug. 1st.—Mr. Erichsen passed a sound into the bladder, and detected a large stone, apparently two inches or so in length. The patient being in good health otherwise, it was determined to perform lithotomy.

The operation was performed on the 7th of August. The patient having been placed under the influence of chloroform, Mr. Erichsen passed a grooved rectangular staff into the bladder; and the stone being at once felt, he proceeded to perform the operation after the bilateral fashion. A transverse crescentic incision was made in the perineum. The centre of the incision was half an inch above the anus, and each extremity of it about the same distance from the tuber ischii. The dissection was carried down in the line of the superficial incision to the central point of the perineum, so as to separate the bulb from the rectum. The scalpel was then thrust onwards into the groove of the staff, through the membranous urethra, and just in front of the prostate, its blade being directed upwards. The knife was now drawn backwards out of the wound, cutting upwards as it was withdrawn, so as to form a vertical incision in the superficial structure, of about an inch in extent, in the middle line, and communicating with the centre of the crescentic cut originally made. The knife being withdrawn, a lithotome caché was introduced along the groove of the staff; and by the withdrawal of this (the handle of the instrument being at the same time depressed) both lateral lobes of the prostate were divided to the extent of about three quarters of an inch—the distance to which the instrument had been previously adjusted. The lithotomy forceps was then introduced into the bladder, and the stone was at once seized. The withdrawal of the forceps was effected with some little difficulty, owing to the large size of the stone, and to the necessity of changing the direction of its axis in their blades. The calculus on removal was found to be of an oval form, with a long diameter of about two inches and three quarters, and nearly two inches in a transverse direction, and from its surface several irregular nodules projected. It weighed three ounces and one drachm. Its external surface was composed of uric acid. A tube was passed into the wound, and left for about forty hours, the urine coming away freely through it.

Aug. 10th.—The report continues as follows: Pulse 84; the patient going on well. From this time he progressed uninterruptedly (with the exception of a slight attack of diarrhœa, which was easily checked), taking his food well, sleeping well, and suffering no pain whatever.

On the 22nd the urine ceased to flow through the wound, and came entirely by the penis.

The wound granulated healthily, and, occasionally being touched with nitrate of silver, was almost entirely healed when he left the hospital on the 11th of September.

It will be seen by a reference to this case that I performed the operation by Dupuytren's method. This plan, as is well known, is the original "bilateral" operation by means of the "lithotome caché," a most beautiful and ingenious instrument devised expressly for it. Civiale modified this operation by making the external cut perpendicular in the mesial line, but retaining the double section of the prostate; and Sir W. Fergusson has still further modified it by confining the section in ordinary cases to the left lateral lobe of the prostate.

The principle of all these three operations appears to be the same—namely, to reach the neck of the bladder through the mesial line, where it is nearest to the surface. The difference in the details is, however, great, and I think most important.

So far as *external* incision is concerned, Sir W. Fergusson adopts Dupuytren's method—the crescentic transverse; thus getting wide space, enabling the rectum to be fairly separated from the bulb and well depressed, and cutting below or rather behind the arteries of the perineum. In all these respects I think this incision is preferable to the perpendicular external cut of Civiale and Allarton.

In the internal incision—that through the prostate and neck of the bladder—Civiale nearly follows Dupuytren, making the cut equally into both lateral lobes by means of a lithotome caché; whilst Sir William confines his cut, except in certain cases, to the left lateral lobe, and makes it with the scalpel.

To my mind the double cut appears the preferable method, as by it an equal extent of incision can be made in the prostate with less danger of passing beyond its limit. Suppose, for the sake of argument, that to extract a calculus it is desirable to make a cut eight lines long into the prostate. If one lobe only is incised, the cut must go to the full extent in it. If both lobes are cut, only four lines need be divided in each of them; and so proportionately to any extent. As the whole under-surface of the prostate is exposed by the transverse external cut, it is as easy to divide both lobes as one. This may be done with the scalpel, and, in such dexterous hands as those of Sir William Fergusson, with perfect safety; but for a less expert master of our art I think the lithotome caché a safer instrument, as by it the extent of incision can, without possibility of error, be regulated to a hair's breadth.

There is one practical point in all these mesial operations of lithotomy—whether Allarton's, Civiale's, or Dupuytren's—which I consider of some little importance. It is the use of the rectangular in preference to the ordinary curved staff. I have now used it several times in Allarton's and Civiale's, and look upon it as possessing three very decided advantages over the curved staff. The first is, that its angle can be placed directly in the membranous part of the urethra, and held there until the knife enters its groove. Thus it becomes an unerring guide to the exact part of the urinary canal that we wish to open. The second advantage is, that it carries the urethra away from, instead of, as the curved staff does, down against the rectum. And the third is, that from the angle onwards the course of the groove is straight and direct, so that the beak of the lithotome or the point of the scalpel is carried on in a straight instead of a curved direction.

Cavendish-place, Jan. 1868.

NOTES ON AN

INTERESTING CASE OF MIDWIFERY.

BY W. H. TAYLER, M.D., M.R.C.S.

ON the 22nd of April, 1865, I was called to attend a woman, aged twenty-nine, in labour with her first child. Finding the pains were very slight I left. I called again in the afternoon, and made an examination, but could not feel the os. I began to suspect there would be some difficulty in the case, but, as the pains were about the same, I went away, telling the nurse to send for me as soon as they became stronger. About eight P.M. I was summoned, and now found the pains were of the right sort. I made an examination, but could neither detect any presentation, nor find the os. I felt about for some time, and at last detected a very small indentation (not an opening) about the size of a pea. This I considered must have formerly been the os, and that I had a case of occlusion of it. I also found the pubes projecting very much inwards, making the antero-post diameter very narrow, and altogether rendering it a case in which I did not feel justified in acting without a second opinion. I therefore sent for my friend, Dr. Stilwell, of Beckenham. He came, and agreed with me as to the nature of it. We also came to the conclusion that nothing remained but to make an artificial os, and overcome the pubic projection by forceps or craniotomy. I informed the husband of the difficulties of the case; he suggested further advice from town, but I told him the confidence we had in each other by reason of our having acted together in several most difficult cases which had occurred in our respective practices, made us feel quite equal to any emergency, and that we declined the assistance of a physician-accoucheur from London.

First, to make an os, I passed one of the blades of a pair of long scissors through the indentation in the uterus, and made several notches round it, which enabled me to introduce the point of the forefinger into the uterus. We then waited to see the effect of the pains. It did not dilate much. Then, by degrees, I introduced the middle finger, and by stretching the edges, somewhat increased the opening. After three hours' work I managed to get two fingers in, and could feel the head presenting. After manipulating for another two hours the opening was sufficiently dilated to render it advisable to rupture the membranes. This being done, the head, after a time, came down as low as the pubic projection would admit; but

here all further progress was stopped. We then applied the forceps, but there was not room enough, and we had to give it up. There was now no help for it but to perforate the cranium. This we did, and after great difficulty succeeded in delivering the woman. There being some placental adhesions, we broke them down, and removed the placenta; and heartily glad we were to complete the case. It was now eight A.M., and we were somewhat fatigued with our anxious night's work.

The most gratifying part of the case was that the patient recovered without a single bad symptom, would insist upon getting up on the seventh day, and was about as usual in a fortnight. Since then her health has been good, the catamenia regular and without pain, and she is now in the third month of pregnancy. She has left the neighbourhood, but will return to it to be under my care for her confinement, and I hope, by inducing labour before the full period, to deliver her of a living child.

Tudor House, Anerley, Dec. 1867.

SOME CONTRIBUTIONS TO THE PATHOLOGY OF FIBROUS TUMOURS.

BY J. H. JAMES, F.R.C.S., &c.,
FORMERLY CONSULTING SURGEON TO THE DEVON AND EXETER HOSPITAL AND DISPENSARY.

THE subject of tumours has, for many years past, so much engaged the attention of the profession, and so many valuable memoirs have been published on the subject—and I may especially mention the last comprehensive and carefully arranged contribution from the pen of Mr. Paget, in Holmes's "System of Surgery,"—that it might almost appear to be a work of supererogation to offer any contribution on the subject, were it not that, in all matters of medical science, there will be parts to be filled in; and there is one class of tumours—I mean fibrous—on which there is some measure of doubt even among the highest authorities. A great number of these have, first and last, come under my care, and I will venture to submit a few, with some observations connected with them, to the consideration of the profession.

There can be little doubt that, although fibrous tumours are generally of a nature non-malignant, yet cases do occasionally present themselves where they are not only malignant, but intensely so; becoming, in their progress, allied to the most intense forms of cancer, although, at their commencement, and it may be through their whole course until they have disintegrated, their pathological characters possessed strong distinctions from cancer. But it is not on this account, simply, that I present the following cases, but rather to show the difficulties and dangers which attend their removal when large, while the necessity for doing so is often but too clear.

CASE 1.—On Dec. 20th, 1862, I was desired to see a lady in the northern division of the county, aged forty. She had a tumour in the right thigh, the middle of which it occupied, and extended upwards nearly to Poupart's ligament, apparently throwing out a prolongation in that direction. It was slightly movable and somewhat irregular on the surface. She was under the care of an excellent surgeon, and, after a careful examination, we agreed that it should be removed; the character being that of a fibrous tumour. This was effected with much dexterity by the surgeon, assisted by my son and myself. From its close proximity to the artery, this required much care. Its base was imbedded in muscular structure. The capsule was not so strongly marked as in many other cases, but the surrounding adipose substance was dense. At its base it was connected with muscular structure, which was partly removed with it, also with the inter-muscular fascia. The prolongation towards Poupart's ligament proved to be a gland, partaking very much of the same appearance as the tumour, and connected with it by dense cellular substance. In the course of the operation, the artery was necessarily bared. The section of the tumour was mostly white and fibrous, with a portion of the centre less solid and of a chocolate colour. The surface was granulated.

March 19th, 1863.—I received a bad account: a quantity of little tubercles in the cicatrix.

June 10th.—Being in the neighbourhood, I saw her. Her state was most singular. The abdomen was covered with small tumours, movable under the skin; and there were several elsewhere, one being on the upper part of the spine, which had produced absorption of the bone, and caused paralysis of the left arm. Part of the wound never healed, and had the character of a decided cancerous ulcer.

She died at the end of June.

The preparation is in the museum. There can be no question as to the extreme malignancy of this disease, which, however, never appeared until subsequent to the operation.

CASE 2.—J. S——, aged twenty-six, not of an unhealthy appearance, was admitted May 8th, 1851. There was a tumour extending from the upper part of the ear to considerably below the angle of the jaw, about the size of an orange. It was firm, a little uneven, and movable in a slight degree. It had not increased very rapidly until recently, for the duration was eleven years. It was clear that, if it could not be removed, it must destroy life by pressure on important parts, or by breaking up and ulcerating. After an anxious consultation with my colleagues, it was determined to attempt its removal, however difficult. This was done on the 14th May. The operation consisted in making crucial incisions (the first coinciding with the direction of the artery) and dissecting back flaps, and separating the tumour above and posteriorly, where the ground was safe; but when I came to the anterior and lower portion below the angle of the jaw, where it actually sank to the vertebral column, as found in the course of the operation, the difficulty was extreme, as may be easily understood by the situation. It was not only imbedded amongst arteries and nerves of the greatest importance, but was also connected with the muscular fibres of the digastricus, stylo-hyoideus, and sterno-cleido-mastoideus. By using my knife as little as possible and my nails whenever they would serve, I had in a great measure succeeded in separating its anterior and deep part, when I sprang an artery, which bled violently. All attempts to seize its mouth, even when the carotid was compressed, were vain. With the kind assistance of my colleagues, Mr. De la Garde and Mr. Edye, I tied the common carotid; this happily stopped the hæmorrhage. I then cut away all the tumour which had been cleared, which gave me greater facility, and also disclosed its character, which was then supposed to be malignant. Feeling that it would be highly dangerous to follow it down to the transverse processes with the knife, which might risk wounding the carotid again, or other important arteries or nerves, I passed a double ligature close to the transverse process to which it adhered.—9 P.M.: No hæmorrhage. Sleepy. Complains of much dragging and soreness of the throat; no other bad symptoms.

May 15th.—The drowsiness has passed off, and no ill consequence is imputable to the ligature of the carotid. He has extreme difficulty in swallowing from soreness and phlegm in the throat. Considerable tumefaction; little fever.

16th.—Difficulty of swallowing relieved. In all respects going on well.

June 5th.—Nothing could have done better than this case up to the present time. The wound had healed with the exception of a small portion under the angle of the jaw, where the root of the tumour was tied, and this discharged quite healthy pus; and also a small portion where the ligature of the carotid remained, which we all thought would safely separate. Without, however, any particular cause, hæmorrhage took place early in the morning, and, on the house-surgeon being called, was suppressed; but he had lost a large quantity of blood. It did not flow *per saltum*, and was not abated by pressure below; consequently, there could be little doubt of its being a refluent hæmorrhage. The day before he had noticed a pulsation in the temporal.

8th.—9 A.M.: Early on the 6th there was a recurrence of the hæmorrhage—half a pound supposed—but stopped by light pressure; not at all controlled by pressure on the carotid below. A compress moistened with collodion was laid on the part, and secured by straps of adhesive plaster. There has been no recurrence of the hæmorrhage since, and everything appears favourable.

14th.—No recurrence of the hæmorrhage. The collodion compress not separated.

21st.—Everything going on well. Made out-patient.

In the middle of August he had an attack of peritoneal inflammation, but recovered.

September 13th.—There is no vestige whatever of the tumour, but all is sound and healthy.

May, 1852.—This man has gone to Jersey.

November, 1858.—I heard of this man being alive; so he could not have had malignant disease, and, indeed, the length of time (eleven years) before the operation goes to the same point.

The preparation is in the museum.

The next case I shall give is a highly interesting one, graphically narrated by my friend and colleague Mr. De la Garde in the St. Bartholomew's Hospital Reports, vol. iii.

CASE 3.—John G——, of Ashton, a healthy farmer's boy, aged twelve, had a fibrous tumour, the size and shape of a pullet's egg, lying, as it seemed, on the left sterno-cleido mastoideus muscle, about two-thirds up. It was said to have been there ten years. It was felt so superficial, and moved so freely, that no complication was suspected.

Oct. 16th, 1847.—The skin, some fibres of the platysma myoides, and the cervical fascia were divided from above downwards and forwards. The tumour was covered by a thin layer of muscular fibres, increasing in thickness towards the sides; in short, it was embedded in the muscle. The loop of the superficial nerve was raised and held up. The fibres of the muscle were then separated and reflected, exposing the smooth surface of the tumour. Dissecting behind it, with the intention of turning it out of its bed, I found its inner face irregularly noduled. The nodules were long, and, acting like pedicles, accounted for its mobility. They went through the muscle, and were connected by dense fibrous attachments to the sheath of the jugular and carotid, and thence across towards the transverse processes of the vertebræ. These I followed until the carotid could be felt beating in front of my finger. A double ligature was then passed under the tumour and divided. On tying the fibrous band, between a pedicle and the sheath of the vessels, excessive nervous disturbance ensued. The boy did not lose consciousness, but the pulse became irregular, the pupil contracted and dilated convulsively, there was trismus and opisthotonos, with extraordinary jactitation of the occipito-frontalis and of the upper extremities, and a total loss of the power of swallowing. Whatever was put into his mouth flowed out again. Amongst other means tried was an enema of opium and assafœtida, which I think did him good. We thought him dying, but the tetanoid spasms ceased in half an hour, and the other symptoms soon after. Then the tumour was drawn out, and the fibrous band included in the ligature cut through by curved button-scissors, thus separating a body which might have excited irritation from the neighbourhood of the pneumogastric and sympathetic nerves. The second ligature was tied without any alarming symptoms, and then the tumour was taken out. There was not much bleeding, but several small arteries were secured. He was tranquil afterwards, took light food without difficulty, and had his bowels regulated.

24th.—All the ligatures had come away. He went out quite cured on Dec. 2nd.

It may be fairly asked why the ligature which produced such dangerous disturbance was not immediately removed. The answer is plain. The convulsion was violent and unceasing; the knot was tied tight at a great depth; it was amongst parts of vital importance, a wound of which might have caused instant death; and the fibre of nerve presumed to be included must have been already crushed beyond remedy.

He kept up an acquaintance with the nurse for several years, during which time he remained in perfect health.

I was present at this operation, and I can fully endorse the accuracy of Mr. De la Garde's statement.

CASE 4.—E. P——, aged eighteen, a very healthy young woman, had a tumour under the angle of the jaw. It felt hard and nodulated, slightly movable, with evident attachments deep under the angle. In the course of the operation it was found imbedded in fibres of the posterior belly of the digastricus and mylo-hyoideus muscles, and had firm attachments to the sublingual gland, which was removed with it; *the cornu of the os hyoides and the pharynx.* The descendens noni was laid bare, and there was great difficulty in dissecting it off the pharynx, a wound of which would have been a serious complication. The structure of the tumour was at the time considered doubtful. It was very hard, had a *raclé* and a distinct capsule. It had been slow of growth—eight years.

In this case I had the carotid compressed to keep the arterial branches empty, and thereby more out of the way of the knife. The preparation is in the museum.

CASE 5.—February 2nd, 1848. A fine sailor, aged sixty-four, had a large tumour situated in the upper part of his neck, and under the angle of the jaw. Rather than leave him to certain death, it was thought right that my colleague, under whose care he was, should attempt its removal. But although every care was taken, and by far the larger part laid bare, it was found that the greatest risk would be incurred if followed to its deepest part, and it was agreed to cut away all the tumour which was cleared, and unite the wound over the remainder. Here comes the ethical part. Had the attempt been carried further, there was a great chance that the man's life would have been brought to a speedy if not an immediate termination, a risk which was run in one at least of the preceding cases (J. S.) Whereas, by the other course, his life might be expected to endure for a considerable period; and life under all circumstances is of such value to most, that it is rarely parted with as long as it can be preserved. At all events, it gives an interval for performing many most important duties. The subsequent history of the case is as follows:—

February 26th.—The sore, at first very large, has now greatly contracted.

April.—He is out of the house, and looking well.

May.—There has been a great increase.

This case terminated, I apprehend, fatally, as might have been expected. But his life was probably prolonged considerably by the course adopted; for even if the whole tumour had been removed, there is perhaps much reason to doubt whether, at his age, the subsequent history might not have been as fatal as in No. 1.

These and probably most tumours attack particular localities. I will mention another where, as well as in the groin, and angle of the jaw, fibrous tumours occur almost with equal risk—I mean the axilla, of which I shall offer the following examples:—

CASE 6.—Nov. 16th, 1837. A healthy-looking young man had a tumour, the size of an orange, in the axilla, implicated with the latissimus dorsi and teres major muscles, and greatly interfering with the motion of the arm. Its duration was three years, and latterly it had increased rapidly. The operation consisted in dissecting it off the tendons of the latissimus dorsi and teres major, and it was necessary to remove a part of these tendons with the tumour. It approached the axillary artery very closely. The subscapularis and circumflex arteries, which were also closely attached to the tumour, were wounded and tied. The tumour was very solid and white, the capsule hardly distinct. He made a good recovery, and was reported in June, 1838, perfectly well. The preparation is in the museum.

CASE 7.—The following case I chiefly give, not so much from the locality itself as from the fact that I knew her to be alive many years afterwards:—Miss I—— had a large tumour connected with the teres major and latissimus dorsi. She was not unhealthy, and no cause could be assigned for it. The nature of the tumour at the time was supposed to be cancerous. In the centre there was a foul, but imperfect suppuration. It closely adhered to the muscular fibres, of which a few were removed with it. I knew her to be alive a few years ago, and perfectly well. The preparation is in the museum.

The next case I shall give occurred in a different region, but so great was the hæmorrhage that it deserves notice with reference to an observation I shall make.

CASE 8.—July 13th, 1853. D——, aged forty-eight, had a large fibrous tumour, weighing one pound and two ounces, which extended from the lower part of the occipital region, where it reached nearly to the right ear, down the cervical spine. Its structure was densely fibrous. It was surrounded by a well-defined capsule, which was extremely vascular, and with which the dense fibrous and muscular structures of the back of the neck were intimately connected. The tumour evidently contained many vessels, whose section left an appearance like that of the dots in the white substance of the brain. (I mention this because, as far as my experience has gone, it is a very singular fact.) There was a most copious hæmorrhage during the operation from numerous arteries, and one, probably of enlarged size (the right occipital), was divided. It may be added that, in this case, the hæmorrhage was so profuse and extensive over the whole capsule of the tumour that I may literally say that I operated under blood, as it was useless to tie the numerous vessels.

The observation I should make in reference to this tumour is that the hand of an assistant should follow that of the operator, and, flatly pressed upon the surface of the tumour, prevent such a flow of blood until the whole is removed. The man made a good recovery, and went out to harvest at the end of August. The preparation is in the museum.

The preceding cases have considerable independent interest, and also possess many characters in common. More or less round or oval, they were situated under the angle of the jaw, in the groin, or in the axilla, with one exception. Internally, in structure they greatly resemble each other, though a little varying in colour and hardness. Most of them threw out outshoots connected with the surrounding tissues; bone may be

especially mentioned; and their attachments consequently were very deep. They were surrounded by capsules, more or less dense or complete: on the inside, indissolubly united with the texture of the tumour; externally, with the surrounding tissues, especially muscular and tendinous fibre; *and were in every instance in juxtaposition to the most important arteries and nerves.*

The danger and difficulty, and even the impossibility in some cases, of removing these tumours may be readily estimated by these facts, and the descriptions of the operations. The copious hæmorrhages necessarily attending them, from the division of the large arterial branches and the vascular nature of their capsules, constituted important elements of this difficulty. Generally speaking, they were slow of growth, and at an early period, when small, might have been removed with comparative ease. A very important point presents itself. To what extent are they malignant or innocent? Nos. 1 and 5 were undoubtedly malignant—the first in the highest degree; while the histories of Nos. 2, 3, 6, and 7 were traced for a sufficient period to warrant the belief that they never recurred, and I may also express my belief that the other cases were equally fortunate.

The most remarkable circumstance is, that there was no *à priori* evidence which would distinguish Nos. 1 and 5 from the others. In No. 1 the tumour had begun to degenerate, and had become malignant, pervading the system, while in No. 7 there was also an internal degeneration, but she has remained perfectly well. The two cases, Nos. 2 and 5, may perhaps be considered as bearing on those singular cases which have been so ably described as recurrent, in some of which the disposition to wear out exists, in others not.

Tumours of precisely the same characters in themselves occur in other regions; and without speaking of those which are internal, or in the testis, I may refer to those deeply seated in the salivary and mammary glands, or in common parts, of which I purpose to send a short notice in continuation of this memoir, and at the same time a few remarks on their diagnosis and prognosis.

Exeter, Dec. 1867.

NOTE ON THE LATE NEW ZEALAND WAR.

BY HENRY SLADE, ESQ.,
SURGEON ROYAL NAVY.

THE notice which was published in THE LANCET of the 2nd November, 1867, of the papers on the New Zealand War contained in the Army Medical Report for 1865, induces me to offer some remarks on them through the columns of the same journal, more particularly with respect to the wounded of the naval brigade.

The writer of the article "On the Sanitary History of the Military Force in New Zealand from 1863 to 1865," speaking of the engagement at Tauranga in April, 1864, and in which, perhaps, the largest naval and military force was employed that ever went into action in New Zealand, says: "The wounded were as soon as possible removed to Tauranga, a mile distant, where they were placed in a house used as an hospital, and in marquees, and attended to and dressed. Some of those slightly wounded, and others who could bear transit, were conveyed to Auckland by steamer for treatment in the general hospital there." This is an error. The wounded of the naval brigade, which formed more than one-third of the whole casualties, were conveyed afloat on board H.M.'s ship *Miranda* at Tauranga, under the care of their own medical officers.

I am the more desirous of correcting this error, because it enables me to corroborate the opinion expressed by Mr. Mouat, V.C., C.B., now Inspector-General of Hospitals, in his paper on the "Medical and Surgical History of the New Zealand War," when he speaks of the wounded soldiers at Tauranga, under his superintendence, not at first doing well. He says: "During the war there was one place at which for a short time wounds did not do so well—at Tauranga. Here the wounds were inclined to take on unhealthy action; the flaps of stumps sloughed, secondary hæmorrhage appeared, and the men generally did badly. The cause was evident, and, as it admitted of prompt remedy, Tauranga became as healthy as any other hospital. The wounded had been placed in a very comfortable house, where plastered walls and ceilings effectually prevented the irregular ventilation which was so beneficial in its effects at Queen's Redoubt Hospital. The house acquired the sickly hospital smell, which was ineradicable; disinfectants did no good, and yet the cubic space allowed to each patient was not less than 800 feet. The patients were most of them removed from this house, placed in marquees, and at once everything was changed; the most unpromising wounds did well, and no more satisfactory cures could have been achieved anywhere." Now, in contrast to this, the wounded men on board the *Miranda* did exceedingly well, and even the worst wounds showed no disposition to unhealthy action; but, on the contrary, afforded many gratifying cases of conservative, or perhaps rather preservative, surgery. H.M.S. *Miranda* was a small corvette, and on this occasion her lower deck was extemporised into an hospital for the Naval Brigade. In this class of ship there is only one deck above the one here used as an hospital, and through this upper deck several openings ("hatchways") communicate directly with the external air. The *Miranda* was also pierced with large side scuttles (portholes) on the lower deck, larger than any other ship in the navy that I am acquainted with, affording abundance of light and fresh air, the two great requisites in an hospital. Besides these means of ventilation, there was the galley fire on this deck—the ordinary cooking fire,—causing a continually ascending column of air near it, and a special but rough and effectual means of directing a current of air to any particular part by windsails. The cubic space for each patient on the lower deck of the *Miranda* could not be easily computed, as the duties of the ship, although lessened as much as possible, were not entirely suspended; men were continually about the deck in the performance of their duty, and I do not think much more than one-half of what Mr. Mouat reckons for his patients in the house ashore could be fairly allowed for the wounded on board the *Miranda*, or about 500 cubic feet per man—perfect ventilation obviating the necessity for great cubic space. The free ventilation in this ship, no doubt, contributed very much to the small amount of sickness in her during a commission of more than four years in the Australian station, as shown by the Statistical Reports of the Health of the Navy.

As a sure proof that the unhealthiness of the temporary military hospital ashore must have depended on causes immediately connected with the building itself, I shall notice some very severe wounds that got well on this occasion on board the *Miranda*, with hardly an unfavourable symptom, although the ship was less than half a mile from the hospital, which had also the advantage of being situated on a hill.

A fine young seaman, aged twenty-five, was shot, while in action, through the left leg, by the accidental discharge of his own rifle. The ball and the whole charge passed through the calf, entering on the inside of the leg behind the tibia, splintering and carrying through the external wound the middle of the fibula and a large mass of muscle, without much bleeding. On the following day he was removed from the field to the *Miranda*, when the wound presented such an ugly and hopeless appearance that the general opinion was in favour of immediate amputation. The wound was explored with the fingers, which could be pushed through the calf with ease; several pieces of bone were removed, and the leg put up in a comfortable position, cold water dressing being applied. At the next examination, as there appeared to be loose pieces of bone at both the upper and lower portions of the fibula, incisions above and below the wound were made over the long axis of the fibula, and the ragged ends cut off with bone-forceps. This required incisions through the soft parts seven inches in length, and through these incisions in the skin the muscles protruded in such a mass, from the general tumefaction of the leg, that there appeared to be a very small chance of saving the limb. However, it was again put up in an easy position; a foot-board, devised by one of the assistant-surgeons, supported the foot and kept the leg slightly flexed and raised; and light poultices were applied frequently over the wound as soon as suppuration was established, the poultices being sprinkled with charcoal whenever there was any fetid odour. He had little constitutional disturbance; and was allowed a liberal diet. The wound healed steadily, the enormous protruding mass of muscle shrank within the incision made by the knife, and the man got well—a proof of the highly favourable circumstances for recovery in which he had been placed. The peroneal artery must have been wounded in this case, if not the posterior tibial; but no artery was tied. A loose tourniquet was at first kept on the thigh. On the eleventh day after he was wounded, considerable hæmorrhage occurred from some vessel, but was arrested by pressure. This man recovered the use of his leg so well in a year that there was little perceptible halt in his gait, excepting on first planting his left

foot on the ground to walk, or in ascending and descending ladders. At least three or four inches of the middle of the fibula must have been removed, the place of which was probably supplied by ligamentous substance. At all events, he did his duty as quartermaster in the passage from Australia to England, including the cold and stormy weather encountered while rounding Cape Horn. This wound was occasionally painted with Condy's fluid diluted, which was kindly supplied to us by the principal medical officer from the military store, and answered the purpose of a disinfectant very well, but I could never discover any great advantage it possessed over the solution of chloride of zinc supplied to her Majesty's navy.

In the arrangement of the wounded men on board the *Miranda*, where economy of space was demanded, the worst cases of wounds of the great cavities and lower extremities were placed in swinging cots along the *sides* of the ship, so that each man had an open porthole near him, which might be closed by a sash at pleasure. In the *middle* of the deck, hammocks were hung, in which the less serious cases were placed—wounds of the jaws, scalp, &c.; thus leaving a passage on each side, by which every wound could be reached and freely exposed to view when necessary. All foul dressings and excreta were thrown overboard as soon as they were removed, which is a great advantage possessed on shipboard—that all refuse can be easily disposed of by the natural action of the wind and tide. A weak solution of chloride of zinc or Condy's fluid was poured into every utensil likely to receive discharges from the patients, that their deodorising power might be exerted as soon as possible. Splints, waterproof materials, and everything applied a second time, were washed with some disinfectant. One medical officer was always in close attendance; and to this I attribute the safety of more than one case. For example, the man mentioned above would probably have sunk from loss of blood had not a medical officer been on the spot to arrest the bleeding. To these minor matters, in conjunction with thorough ventilation, and the fine climate of New Zealand, must be attributed the success which attended the treatment of cases on board a small ship suddenly and without preparation converted into an hospital. The season, too, was favourable to the healing of extensive wounds—the New Zealand autumn, the temperature seldom rising above 60° Fahr. in the day, and the nights being cool.

It is not easy to find a convenient and well lighted place to perform the larger operations in a ship, particularly in a small vessel. It may interest naval medical readers to know that in the *Miranda* we found the *square* of a hatchway on the lower deck answered very well. The gratings were put on, a midshipman's chest placed on the top, and mess tables laid on it to the required height and position, forming a very fair operation-table for amputations or exploring deep wounds, as the light fell from above on the patient. We selected a time for operating—when the officers and men had gone to the burial of their unfortunate shipmates who were killed, and were thus left in comparative quiet.

A bullet wound of the left elbow, in a seaman aged twenty-three, by which the joint was opened, was attended at first with so much swelling and constitutional disturbance, followed by the characteristic reddish-yellow discharge from the wound, that amputation or excision of the joint was regarded as inevitable. By simple local applications, and fixing the joint in an immovable position, it soon assumed a healthy appearance; and the man preserved a useful stiff limb without an operation, and I believe is now a commissionaire.

Two cases of severe flesh wounds from bullets—one on the inside of the thigh, and one in the lumbar region grazing the ilium, in seamen aged respectively thirty-two and twenty-nine years—showed every appearance of extensive sloughing for some days, until pieces of clothes, lead, and other foreign bodies had been removed from the wounds, when they improved in appearance and soon got well.

I regard all these cases as instances of wounds in which the surgical treatment contributed the smallest part to the cure, and which would not have done well except under the most favourable atmospheric conditions, notwithstanding that they all happened in healthy men.

Another quick cure in which there was very little surgery required was in a boy accidentally shot through the thigh by a Colt's revolving pistol. The ball was fired within a few feet of him, and, from its high velocity, made a clean wound, passing through the muscles at the back of the thigh nearly the whole diameter of the limb. The lad was immediately put to bed, and a roller applied round the thigh, pressing the sides of the wound together: this was all the treatment. There was no sloughing, and the boy was quite well and on his legs in three weeks. This wound, from the small sharp bullet passing rapidly through, partook of the nature of a punctured wound with a sharp instrument.

(To be continued.)

PEROXIDE OF HYDROGEN AS A REMEDY IN DIABETES.

BY JOHN DAY, M.D.

THE following short history of a case of diabetes, which had resisted all ordinary treatment for more than three years, and which is now rapidly yielding under the influence of peroxide of hydrogen, will, I trust, prove of interest to the readers of THE LANCET.

In March, 1864, I was consulted by a married lady, aged thirty-six, the mother of two rather strumous-looking children. She was in the seventh month of pregnancy, and complained of intolerable itching and irritation about the external organs of generation, accompanied by a frequent desire to pass water. On inquiring further into her case, I found that she suffered from constant thirst and other symptoms indicating the presence of diabetes, and that the pruritus was probably caused by the irritating action of diabetic urine.

A chemical examination of the urine confirmed my diagnosis. It gave the characteristic dark sherry colour when boiled with liquor potassæ. It readily fermented on the addition of a little yeast, and its specific gravity was 1040. I at once placed my patient on the diet usually recommended to sufferers from diabetes, consisting chiefly of meat, poultry, fish, eggs, greens, cauliflower, spinach, watercresses, &c.; milk, cheese, and butter, with only a small allowance of stale or toasted bread. Light colonial wines, similar to claret and Burgundy, were also allowed, and lime-water with milk, pure rain-water, soda-water, and weak animal broths, were recommended for allaying the thirst. The medicinal remedies employed comprise nearly all that have ever been recommended in diabetes, such as opium, ammonia, creasote, permanganate of potash, a weak solution of phosphoric acid, &c.

In June, she was delivered of a dead child, after having arrived at the full period of gestation, and for a short time the diabetic symptoms entirely disappeared.

In September, 1866, she was again delivered of a dead child, at the full period, and again the diabetic symptoms entirely subsided, and for about the same time as on the former occasion,—perhaps about two months.

From this time the disease began to assume a more alarming character. The patient, naturally a large, well-nourished woman, weighed, when in health, *nineteen* stone; now she weighs *fifteen* stone. This I believe to be a very unusual weight for a person who has been passing large quantities of saccharine urine for more than three years. She is the daughter of an asthmatic mother, and her father died of heart-disease. She is not phthisical, nor is there any history of phthisis in her family. In addition to her unusual weight for a diabetic patient, there are two other peculiarities in her case. She has never had a very dry skin, and she has never suffered from constipation; indeed, I know as a fact that, until the last six or eight months, she had had a kind of chronic diarrhœa, the bowels acting eight or ten times a day, and the more frequently and freely they acted the better she felt. This relaxed state of the bowels had existed ever since she recovered from an attack of dysentery, fifteen years ago.

Aug. 10th, 1867.—On visiting my patient this morning, she said, "Doctor, I am no better; your medicines and your dietary-scales have done me no good. The thirst is almost beyond endurance; can you give me nothing to relieve it?" At this time the case was most unpromising; she was passing, on an average, five quarts of highly saccharine urine every night. She had to get up every hour to pass water and to drink, and she looked depressed and worn from want of sleep. She had several small carbuncles on her back, and her legs and feet were so cold that she could not do without bottles of hot water in the bed.

While pondering over the hopeless condition of my patient, it occurred to me that if I could oxidise the sugar that had been taken up in the general circulation, it would be an approach towards the natural mode of its elimination by the lungs. With this object in view, I gave half-drachm doses of

ethereal solution of peroxide of hydrogen mixed in an ounce of distilled water, three times a day.

To enable me fully to explain the theory on which I base my treatment, would occupy far more of your valuable space than I could justly claim. Schönbein believes that peroxide of hydrogen is H O + antozone, and that the blood-corpuscles possess, in a very high degree, the property of decomposing it, and of transforming its antozone into ozone, without, in themselves, undergoing any very rapid change; and he further believes that ozone is the only condition in which oxygen possesses any active combining properties. Assuming these views to be correct, we should possess in ethereal solution of peroxide of hydrogen, which would be rapidly absorbed, a ready means of destroying, by oxidation, the sugar in the blood, and of also maintaining the animal heat, which, in the treatment of diabetes, is an important consideration. I may observe, that what is sold by Mr. Robbins as Dr. Richardson's ozonic ether is, in reality, a solution of peroxide of hydrogen in ether. This may be readily proved by adding a few drops of it to a weak solution of chromic acid: a beautiful blue colour will be the result, caused by the formation of perchromic acid. This preparation is in every respect similar to that which I have been using, and in the therapeutical effects of which I have now had some years' experience.

I commenced the use of this new remedy on August the 10th, and, as the following extracts from my case-book will show, with most gratifying results to the patient:—

Aug. 12th.—From 10 P.M. to 10 A.M., passed about five pints of urine. Previously, for many months, the quantity of urine passed during the night averaged five quarts.*

13th.—Quantity of urine passed during the night, rather less than three pints and a half. Thirst not so urgent.

14th.—Quantity of urine passed during the night, two pints and a half. Urine strongly acid; specific gravity 1046. Thirst much less urgent.

16th.—Quantity of urine passed during the night, rather less than forty ounces. The patient very much improved in every respect. I give her own words:—"I have no thirst now; no more than I had in olden times. I feel that I am cured if it will only last."

17th.—Still improving. Quantity of urine passed during the night, thirty-six ounces; specific gravity, 1040. Went to bed at ten, and only got up once during the night. Before taking the new medicine, had to get up every hour during the night for months past. Used to be so cold as to require bottles of hot water to spine, legs, and feet. Since taking new medicine, has been quite warm and perspiring. No unnatural thirst. Had been taking an opium pill night and morning up to this date. Pills to be discontinued, and no other medicine used but ethereal solution of peroxide of hydrogen. No alteration has been made in the diet for a long time past.

18th.—Quantity of urine passed during the night, thirty-four ounces. Patient states that she has not for a long time had such calm and refreshing sleep as she has experienced since taking the new medicine.

19th.—Quantity of urine passed during the night, thirty ounces. Specific gravity, 1038. No thirst. Before commencing the new medicine, often drank twenty glasses of water during the day. Now perspires freely after every meal, and after drinking anything. Always feels moist and warm, particularly when in bed. Slept well last night.

20th.—Quantity of urine passed during the night, twenty-seven ounces; specific gravity, 1035. Slept well.

21st.—Quantity of urine passed during the night, thirty-two ounces. Feels perfectly well. No thirst.

22nd.—Quantity of urine passed during the night, forty ounces; specific gravity, 1040. Bowels act once a day. Did not have to get up once during the night. Thirst gone; drinks nothing at night.

23rd.—Had a good night; did not have to get up once. Took no drink during the night. Quantity of urine passed during the night, twenty-one ounces; specific gravity, 1032. To use her own words, "My thirst is gone—I don't know what thirst is."

24th.—Had a good night. Only passed eighteen ounces of urine from 6 P.M. to 10 A.M.; specific gravity, 1040. No thirst.

25th.—Quantity of urine passed during the night, twenty-two ounces; specific gravity, 1040. Did not wake once during the night.

26th.—Feels quite well, but passed rather more urine during the night; quantity, one quart seven ounces; specific gravity, 1040. Drank some sweet punch yesterday, which may account for the increase of urine. Did not have to get up in the night.

27th.—Slept well. Quantity of urine passed during the night, twenty-four ounces; specific gravity, 1040. Says she feels as well as ever she did—never felt better in her life.

Yarra-street, Geelong, Australia, Aug. 1867.

* In this case I find it impossible to gain a correct knowledge of the amount of urine passed during the day. All the future measurements will represent what was passed from ten at night to ten in the morning.

EXPERIMENTS CONNECTED WITH SMALL-POX, INOCULATION, & VACCINATION.

BY JOHN SHORTT, M.D., F.L.S., M.R.C.P.L., &c.,
GENERAL SUPERINTENDENT OF VACCINATION, MADRAS PRESIDENCY.

(*Continued from page* 11.)

Second Series of Cases.

Nov. 1st.—Having heard that there was a case of small-pox in the cantonment of Arcot, adjoining the house of Mr. Leigh, inspector of police, we proceeded to examine the boy, aged twelve years, of the Pariah caste. He is well covered with small-pox eruptions, the disease being in a vesicular stage; vesicles pearl-coloured, and of the size of a millet-seed. (Seventh day.) No fever present. He states that he perceived the eruption about seven days ago. The larger and more prominent vesicles were ruptured, and a clear lymph-like fluid taken therefrom, and the following animals inoculated therewith on the spot:—

1. A red heifer, two years old.
2. An aged tattoo (pony).
3. An aged jenny.
4. A goat.
5. A dog.

2nd.—The pony happened to be a traveller's, of which I was not aware at the time; consequently, the result on this animal is not known. In these different animals insertions were made as follow:—

1. Heifer; teats and ears.
2. Pony; nostrils.
3. Ass; nostrils.
4. Goat; scrotum and inside of the ear.
5. Dog; ditto ditto.

5th.—Nothing decidedly perceptible in any of the animals except the goat: the part where the matter was inserted feels hard.

6th.—One of the insertions on the teats of the heifer is slightly raised into a small papule, which is slightly umbilicated. This was opened with a lancet, and the little lymph obtained therefrom was transferred to the left arm of the boy, No. 3 (First Series), his right arm being previously operated on from the Timmery cow-calf.

7th.—Lymph was again this day transferred from the heifer to a boy, aged seven years, of the Pariah caste. There was scarcely any lymph in the vesicle ruptured yesterday. There are one or two vesicles visible over the other insertions. These were also ruptured, and what little came was scraped and put on.

8th.—The heifer operated on was discharged, the sites of punctures having dried up after the lymph required was taken.

In the ass it was a complete failure, as regards the inoculation.

The dog had two small vesicles in each ear. From these a calf of four months old was operated on; but this animal was eventually lost sight of. Another dog was also operated on from this source. The transfer from one dog to another succeeded, the insertions only showing true indications of the disease.

9th.—Lymph was taken from the scrotum of the goat, and transferred to a child named Chowry Ammall, aged eighteen months.

In this child the punctures showed no indications of success on the 12th, consequently the right arm was operated on again with vaccine lymph.

15th.—Two of the original insertions in left arm, which gave indications of failure on the 12th, are now in a papular state, and when examined by a magnifier contain a little vesicular matter; the vesicles themselves are acuminated. On the right arm the vaccine insertions are rising.

16th (eighth day after original operation).—Two punctures

on left arm have succeeded well, although the vesicles are small, and contain but little lymph. The reinsertions on the right arm have also succeeded, having the same character, appearance, and size as those in the left. Vesicles of the size of a coriander seed. In the right arm, next the vaccine insertions, one of the original punctures is forming.

17th.—The eruptions on the left arm were broken, and a little lymph removed for transfer to another subject.

20th.—The eruption on left arm scabbing; that of the revaccination of right arm has taken on the true character of a vaccine vesicle of the eighth day; and one of the original insertions in this arm, next the vaccine insertion, has formed, and resembles the other in every respect, except size, which is a little smaller. This vesicle was ruptured, and the lymph transferred to another subject. The patient (Chowry Ammall) is reported to have had high fever last night, and the bowels deranged (loose).

22nd.—Modified small-pox eruptions are interspersed over the face and upper extremities of this subject this morning; a few are showing themselves about the lower extremities, but the eruptions just now resemble more those of prickly heat. The patient is reported to have passed a very restless night. Is cross now, and slightly feverish. Eruptions on left arm, and original one in right, scabbing; whereas the revaccinated punctures in right arm are in a state of maturation.

23rd.—The eruptions on surface and extremities increasing; vesicular on face and upper extremities; papular about lower; constitutional symptoms better. The whole of the eruptions number from 100 to 150.

25th.—This morning, possibly, there are between two and three hundred eruptions, while a few only exhibit the true umbilicated character of small-pox; the majority are oval, bladder-like vesicles, resembling chicken-pox, whilst a portion have acuminated forms, and give a hard and stony-like feel, resembling in this respect the eruption called stone-pox.

Dec. 1st.—The eruptions are scabbing; health better.

(To be continued.)

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

HOSPITAL OUT-PATIENT PRACTICE.

ULCER OF THE LEG.

WE could scarcely have chosen a more common surgical ailment than that which is the subject of the following notes. Comparison of the modes of treatment adopted for it by the authorities whose names are here collected cannot fail, we think, to be of much interest to the profession.

ST. BARTHOLOMEW'S HOSPITAL.

Mr. Thomas Smith adopts the following classification as most convenient for clinical teaching and therapeutical purposes. He believes it to be of first importance to decide whether an ulcer be of syphilitic origin, or whether it be due to other causes, such as anæmia, insufficiency of food, debility, old age, eczema, varicose veins, hypostatic congestion, or local injury. The diagnosis of syphilitic ulcers he grounds on the antecedents of the patient; on the position of the ulcers, usually above the middle of the leg; their number, often more than one, or if one only is open, scars of former ulcers are usually to be found. The shape of the sore is taken into account—usually crescentic or circular, if syphilitic; the condition of the surface of the ulcer, which, unless healing, looks rotten, and generally contains a core formed of dead tissue; while the edges and environs of these ulcers are often stained a dirty tawny red.

As regards prognosis, Mr. Smith's experience is that in a general way syphilitic ulcers are the most amenable to treatment. That the depth of an ulcer (within moderate limits) more unfavourably influences the chance of recovery than its extent; that ulcers over the subcutaneous surface of the tibia are more difficult to cure than those situated over the fleshy parts of the leg; that those sores that are based on the periosteum are well-nigh incurable; and that ulcers involving the whole circumference of the limb are incurable in out-patient practice.

Treatment.—Iodide of potassium and bark internally, together with black wash or red precipitate ointment locally, seldom fail to cure syphilitic ulcers. Inflamed, irritable, or painful ulcers in feeble people are treated with bark or quinine, and by the application of morphia ointment or water-dressing to the sore. The same state of the ulcer in free livers is found to be benefited by the use of purges in addition to the above treatment. *Healing ulcers* are treated with water-dressing or simple cerate. For chronic or callous ulcers, the red precipitate is found to be a serviceable local application, while the constitutional remedies vary with the state and circumstances of the patient. The *cold* ulcer, as described by Mr. Paget, is treated by tonics, with opium locally and internally. *Varicose* ulcers are treated on general principles; the heroic but successful treatment by ligature of the veins is not carried out, on account of its unsuitability to out-patient practice. Bandages are employed in the treatment of all ulcers. Sloughing sores, which are now of rare occurrence, are at once admitted into the hospital.

GUY'S HOSPITAL.

Mr. Bryant has made the subject of ulcers of the leg one of the special topics of his clinical instruction, having had during the last few months* a series of cases under his care illustrating the chief forms of such an affection. He practically divides all ulcers into the cellular membranous and cutaneous sores: the former being invariably due to some general or constitutional cause; the latter, probably, to some local one. In the treatment of the cellular membranous sore, the remedies must be directed to the constitutional cause or cachexia which induced the disease, tonics being invariably required, and, when syphilis is the origin of the affection, combined with the iodide of potassium. The local treatment in these cases is of secondary importance, water-dressing being in the majority of cases all that is necessary. In the treatment of the simple cutaneous sore a variety of measures are sometimes required; for an inflamed ulcer, which requires soothing treatment, has to be treated differently from an indolent sore, which needs stimulating; a sloughing sore, from excess of action, requires an opposite treatment to a sloughing sore due to a want of power. All these cases have to be treated upon ordinary surgical principles; for Mr. Bryant is apt to teach that there is no better barometric test of a patient's condition than the appearance of a sore: a healthy sore rapidly becoming indolent on a decline of the patient's powers, or sloughing, or any extreme depressing cause making itself felt; whilst, on the other hand, a weak or indolent ulcer rapidly puts on a healthy aspect on any improvement in the powers of the patient taking place. When a simple sore is inflamed, therefore, the local and constitutional symptoms are usually treated by opium lotion, and opium internally, with or without tonics. When a sore is indolent it is stimulated with nitric-acid lotion, or the terchloride of carbon lotion; and, if connected with syphilis, black wash. When a sore is sloughing from excess of action in the part, the constitutional irritability is allayed by opium, tonics, and stimulants; and when sloughing from excess of indolence in the sore, by local stimulating applications combined with tonics. When varicose veins coexist with the sores, bandaging the limb or strapping is, as a matter of routine, had recourse to, unless absolute rest can be maintained; and in all cases bandaging the limb is, as a rule, enforced. Any special treatment of ulcers Mr. Bryant looks upon as an impossibility, an ulcer, like an ordinary wound, requiring treatment adapted to the special cause or peculiarity.

GREAT NORTHERN HOSPITAL.

Mr. Gay, who has made the subject of ulcers of the leg, with their most commonly allied disorders, *varicosity* and *discoloration of the skin*, the theme of the late Lettsomian lectures, founds their treatment upon a classification differing materially from that of most writers, but least from that of Mr. Syme.

* Mr. Bryant dividing his out-patient cases into classes of disease, and taking up every few months special classes of cases for clinical instruction.

His classification has a purely pathological basis, and recognises three kinds of ulcer — namely, the *idiopathic*, the *venous*, and the *arterial*. His treatment is concurrently simple.

The first is the ulcer that, traumatic or not in its origin, depends for its persistence upon local but not abnormal peculiarities in the vascular system in that portion of the limb in which ulcers almost invariably form—namely, between the ankle-joint and the calf.

An ulcer so situated, ever so simple, and in the healthiest individual, is very slow to heal on account of the inevitable tendency of the tissues involved to veno-capillary congestion and its consequences. But, beyond this, it is subject to modifications through the influence of the ever-varying conditions of the general health, as well as of constitutional taints, such as struma and syphilis.

Mr. Gay says that with this form of ulcer there are no morbid changes, essential to the existence of the ulcerative process, to be met with beyond the immediate sphere of its activity. Its typical form is the "broken shin."

The treatment is simple:—

1. *General.*—Rest, with the elevation of the foot above the level of the pelvis.

2. *Local and constitutional.* — When painful and inflamed, topical bleeding by leeches, or scarifications tolerably deep *across* the edges; warm water dressing; moderate purgation, and opium. If the ulcer has become chronic and the base thickened, Mr. Gay recommends a slightly stimulant lotion—e.g., dilute nitric acid and opium; or blisters, with the cautious administration of iodine or mercury, if struma or syphilis appear to exert an influence on the sore. If there is general want of power, stimulants, tonics, and good nourishment.

There are ulcers of this class, however, which resist these methods of treatment—extensive superficial ulcers, with a subacutely inflamed base, and with clots of gummy, ichorous discharge adherent to its edges. Mr. Gay believes that this ulcer persists by the propagation of the ulcerative action from the decaying molecules to the new nucleated cells as they are evolved from the living tissues. Nothing short of the destruction of the surface will make such an ulcer granulate, and this is best accomplished by the solution of the pernitrate of mercury, once, twice, or thrice applied, at intervals of two or three days.

A large number of ulcers are associated with varicose veins. From numerous dissections, and for other reasons, Mr. Gay doubts the alleged etiological relation of these disorders. *Remotely*, the veins might have such a relation to the ulcer; but this, he thinks, is by no means clear. *Directly*, they certainly have none, and tying the veins is of no real advantage to them.

There is a more severe form of ulcer, often coincident with varicosity, and as often without it, but very constant with discoloration—"*bronzing*"—of the skin, which Mr. Gay has traced to *obstruction*, by clot principally, *either of the saphenous, or the deep venous trunks, most generally of the latter veins*. This is the "venous" ulcer.

Ulcers of this class are moderately deep, secrete abundantly, often bleed, and are situated either on a portion of indurated skin, or skin rendered boggy by veno-capillary dilatation,—the "tissu spongieux," or "caverneux" of the French writers. Such ulcers will heal by rest and elevation of the leg; but not permanently. Free elliptical incisions along either side of the ulcer constitute the only treatment that can secure for them permanent cicatrisation.

The use of spiral bandages for the quasi "varicose ulcer" has been much extolled. Mr. Gay believes them to be useless, and the principle upon which they have been recommended, a fallacy. They have been supposed to supply the place of valves that have become inert by disease. Mr. Gay avers, in the first place, that varicose veins, as a rule, are not endowed with valves; and, secondly, that in veins in which they exist, valves do not, as these bandages do, *interrupt* the current.

The "arterial" ulcer differs materially from the former kinds of ulcer. It is the large, deep, cold ulcer, which often, with intervening islets of diseased skin, occupies the whole of the leg, from just below the knee to the ankle. As it deepens, so it invades fascia, muscles, bones, and even the deeper vessels.

Mr. Gay has traced these ulcers invariably to disease affecting the coats of the deep arteries of the limb, especially the anterior and posterior tibial. They are positively incurable by any means yet adopted; and amputation, excepting under exceptional circumstances *of a favouring nature*, is a very hazardous proceeding. One of the worst specimens of such an ulcer is now under observation in the wards of the hospital.

KING'S COLLEGE HOSPITAL.

The most numerous class of cases among the poor, according to Mr. Wood, is that of varicose ulcer. Usually placed a few inches above the inner or outer malleolus, and accompanied by a brownish-red, dry discoloration, or an eczematous desquamation of the skin around, these ulcers are often obstinate and tardy in healing, and are usually the most frequent in recurring. In the more acute cases of this sort, and those attended by heat and pain, Mr. Wood finds that by far the most convenient, comfortable, and effective plan of treatment is by the acetate of lead and glycerine lotion placed on lint next the sore, changed every night and morning, and surmounted by a wet bandage, carefully adjusted, and kept moist by being wetted from time to time during the day. This plan has the additional and valuable recommendation of necessitating the important adjunct of cleanliness of the part. If the pain be very great at night, five grains of the opium and soap pill are given every night, and the bowels are acted upon daily by a sulphate of magnesia purgative. When the heat and inflammation subside, which soon occurs under this treatment, the lunar caustic is applied twice a week to the edges of the sore, which is then strapped with soap plaster. Strapping, however, is found not to answer in cases attended with an irritable eczematous condition of skin, in which small and troublesome ulcers are apt to follow its use in other places chafed or galled by the strapping. In such cases the continuation of the lotion and wet bandage to the end of the treatment answers best, with the internal administration of an acid tonic and occasional warm aperients, and opium at night. In obstinate cases of this kind the administration of the solution of the arseniate of potash with quassia infusion, about half an hour after meals, seldom fails to produce a cure.

In sloughing and phagedenic ulcers, with congested edges, dark-red granulations, and sanious discharge, rest in the recumbent posture is indispensable in the treatment, with aperients, succeeded by tonics and opium, administered internally. The local application from the first in these cases, in Mr. Wood's practice, consists of a solution of carbolic acid in glycerine-and-water, of the strength of about 3 or 4 per cent. of the pure acid. This is applied on lint, and covered with oiled cotton or silk and a light bandage. This has been found remarkably efficacious in cleansing the surface of indolent, ash-coloured, sloughing granulations, as well as in the more extensive sloughs, and in inducing healthy action and cicatrisation.

In simply indolent ulcers the local application of the chloride or sulphate of zinc lotion, in the proportion of 2 to 3 grains to the ounce, is of the most use. If the edges of the sore are thick, indurated, and callous, the caustic chloride of zinc paste applied to the edges has been found to induce a more even and healthy cicatrisation when the surrounding skin has not been too firmly bound down by induration.

In cases of irritable rupious, or serpiginous ulcer, with suspicion of a syphilitic taint, the fresh-made ointment of the red oxide of mercury is found, when it can be borne, the most speedily effective. It is usually combined with opium at bedtime, and, when other signs of syphilidæ are present, with the administration of iodide of potassium. If the pain be very great, and the above ointment cannot be borne, the fresh-made mercury ointment rubbed well up with the extract of belladonna, in the proportion of a drachm of the latter to an ounce of the former, applied to the sore on lint, is usually effective in allaying the pain, and inducing healthy action.

In some cases, attended with but little discharge, strapping with soap-plaster over the lint spread with this ointment, and left on for two days, is found convenient and comfortable. In cases with inflammatory redness, however, a wet bandage so applied is better.

In weak ulcers, with pale flabby granulations, Mr. Wood uses locally an aqueous solution of the perchloride of iron in the proportion of 2 or 3 grains to the ounce, with the internal use of the tincture of the same preparation. Mr. Wood has employed, as a useful adjunct to the treatment in those troublesome cases of sores placed just above the tendo Achillis, continually stretched and irritated by tension in walking, a high-heeled shoe, or temporary pad placed under the heel, until cicatrisation has fairly progressed. It must, however, not be continued too long, for fear of promoting permanent contraction.

ST. MARY'S HOSPITAL.

Mr. Norton endeavours to simplify the treatment of chronic ulcers of the leg by dividing them into three classes,—1st, inflammatory; 2nd, non-inflammatory; 3rd, those due to an existing local cause.

Under the first head, he considers those ulcers around which the integument is reddened, swollen, puffy, and tender to the touch, and which are invariably accompanied by constant pain, more or less severe, though the wound itself may be small, red, and dry, or, on the contrary, covered with large, red fungous granulations, or it may be even phagedenic in appearance. As a rule, there is but little suppuration in these cases. Moderate antiphlogistic remedies, coupled with anodynes, seem to be the most beneficial, such as the following pill, given twice a day for a time: Potassio-tartrate of antimony, one-sixth of a grain; powdered opium, one-third of a grain; mercury pill, two grains; confection of roses in sufficient quantity. But it must be remembered that even this small dose of mercury is capable of producing salivation. Attention is paid to the bowels, which should be frequently relieved by an ordinary rhubarb draught. Locally, the treatment adopted is emollient, as a warm poultice sprinkled with laudanum, and in a few days changed, if necessary, to a bread poultice saturated with a lotion composed of solution of diacetate of lead, five minims; tincture of opium, half a drachm; water, one ounce,—applied at the natural temperature.

Under the second head, or non-inflammatory class, he places those ulcers which are accompanied by little or no pain, which have but little effect on the general health, and which, as a rule, have large anæmic or œdematous unhealthy granulations, covered by a thin puriform secretion, possessing no pretensions to the character of laudable pus. They may be surrounded by elevated tallowy edges; and the wound may be shallow or deep, and coated with a greenish, unorganisable lymph. These Mr. Norton treats with a lotion of carbolic acid (five grains to the ounce); but lately he has tried largely the treatment by exclusion of air, and for that purpose has applied pieces of tissue-paper, steeped in Dr. Richardson's styptic colloid, and accurately fitted to the ulcer; or a solution of mastic in spirit made into a paste, with trisnitrate of bismuth, and applied upon lint, kept in position by a strip of soap plaster, care being taken first to wash and thoroughly dry the wound. Each application has its merits, but the latter produces no smarting of the surface; on the contrary, by means of the anodyne properties of the bismuth, it subdues any nervous irritability. If no secretion remain upon the wound at the time of the application, the lymph effused from the granulations tends to become organised, and the process of healing is promoted.

Under the third head, Mr. Norton arranges those ulcers due to a persistent local cause, as varicose veins, or necrosis, the treatment of which depends mainly upon the removal of the exciting agent. The former are always accompanied by an enlargement of the superficial veins of the extremity, which, by obstructing the return of the blood, lessen the supply of nutriment to the part, and thus not only prevent the healing of an existing ulcer, but render the rest of the integument peculiarly prone to ulceration. The object here being to compress the superficial veins and regulate the circulation, Mr. Norton encircles the limb by strips of soap-plaster for some distance above and below the wound, and afterwards applies a bandage from the foot to the thigh.

Mr. Norton considers that total rest is the most reliable remedy for all ulcers, but it is without this valuable agent that the surgeons of the out-patient departments have to deal with the disease. As a rule, also, he finds internal medicines of but little avail, with the exception of purgatives and anodynes; and, as regards local applications, prefers the milder remedies, as calamine ointment, or a weak solution of carbolic acid, the zinc and resin ointments, and the stronger lotions, being too stimulating, irritative, or drying.

If the ulcer be connected with syphilis, five grains of the iodide of potassium are given three times a day; and if, as is frequently the case, the ulcer be surrounded by an eczematous or a scaly eruption, a weak lotion of diacetate of lead and glycerine is applied, the latter keeping the epithelium in a moistened state, and so preventing the irritation which is produced by the dry scales.

UNIVERSITY COLLEGE HOSPITAL.

Mr. Christopher Heath believes that an accurate diagnosis of each case of ulcerated leg is essential for its successful treatment, and that the hap-hazard plan of poulticing pursued by patients, and of applying the red nitric oxide of mercury ointment by chemists to every form of ulcer, is as absurd as it is common. Mr. Heath has long abandoned the use of ointments for lotions, but finds it worse than useless to prescribe lotions unless the patient is *shown* how to apply them properly on lint covered with oil-silk; if merely *told* how to do it, the lint is usually cut larger than the oil-silk, or the latter is put next the skin. The best practice is for the "dresser" to apply the dressing with water at the time, and the patient to use the lotion at the next dressing.

The commonest form of ulcer, particularly amongst married women, is the syphilitic. This fact is often not recognised, and ulcers are treated with ordinary stimulants for months unsuccessfully which heal in a few days under yellow wash (one grain of bichloride of mercury in one ounce of lime-water), and iodide of potassium internally. The ulcer is usually multiple, very irregular, and the skin around has a peculiar "worm-eaten" appearance. The ulcers commonly extend up the leg to the knee, and there may be thickening of the tibia. There is a yellowish-white surface to the sores, and a thin discharge exudes in considerable quantity. The scars of former ulcers are often apparent, and a history of frequent abortions is sufficient confirmation of the diagnosis, without going into more minute particulars. Mr. Heath has noticed that these ulcers are not so numerous at University College Hospital as at the Westminster Hospital, where the patients, as a rule, are of a lower order, but the proportion which they bear to other forms of ulcer is about the same at both institutions.

Ulceration about the foot is usually of this kind, and so also ulceration between the toes; and the only form these are liable to be confounded with, in Mr. Heath's experience, is that dependent upon scabies. Ulcer of the leg depending upon scabies is constantly confounded with ordinary ulceration, but requires specific treatment for its cure. The ulcers vary very much in size (this depending principally upon the time the disease has existed), and often have little to distinguish them from simple ulcer, unless attention is directed to the surrounding skin. Here evidence of scabies may be readily discovered, and probably also in other parts of the body; and nocturnal irritation will generally be found to exist. Mr. Heath never uses the sulphur ointment for any form of scabies; but, here as elsewhere, has had every reason to be satisfied with the sulphide of calcium lotion (sulphur and quicklime, of each one ounce, boiled in a pint of water), provided the affected part is well washed with hot water, and the lotion applied whilst it is warm and moist, and then allowed to dry on. Two or three applications of this kind remove the scabies, and the ulcers then heal readily with water dressing.

The eczematous ulcer is very commonly met with, the disease depending usually upon varicose veins. As the eczema has existed for many months before it was scratched and irritated into ulceration, it will be necessary to administer arsenic internally for its cure; and water dressing, with careful bandaging, may be applied to the leg. In obstinate cases of the kind, Mr. Heath has found weak iodine lotion (one drachm of the tincture to eight ounces of water), and in the later stage zinc ointment, very serviceable.

The ordinary varicose ulcer heals readily with a lotion of nitrate of silver (two grains to an ounce), and constant bandaging; but there is a form of irritable varicose ulcer (usually of small size and near the ankle) which is very difficult to cure, and in the treatment of which opium internally, in the form of compound soap pill (five grains thrice daily), is very useful.

The indolent ulcer of long standing, with thickened margins and a callous surface, is not very common in Mr. Heath's practice; but when it occurs it is invariably and rapidly cured by strapping the ulcer, and the leg for a short distance above and below it. The strips of plaster should be dipped in *hot* water before they are applied, as they thus fit the part much better than if merely warmed; and no other dressing is to be put upon the ulcer itself. A bandage is applied over the plaster, which latter requires renewal twice a week.

SICKNESS IN THE PRISONS OF ROME.—A mysterious disease has suddenly appeared in the prisons of Rome, which causes an extraordinary mortality among the young and healthy prisoners. The Government maintains that it is neither cholera nor typhus fever, fearing to be accused of having crowded too many persons into unwholesome places. The physicians say nothing, and the ignorant population give way to conjectures little favourable to the authorities.

Reviews and Notices of Books.

Die Normale Linsenentbindung, der "Modificirten Linear-extraction" gewidmet. Von Dr. ADOLPH WEBER, in Darmstadt.

UNDER the title of "Normal Lens Extraction" Dr. Weber has communicated a highly interesting paper to the *Archiv für Ophthalmologie*, and has advanced doctrines well worthy the attention of ophthalmic surgeons. Regarding the method of linear extraction of cataract as a great step in advance, as far as principle is concerned, on the method by flap extraction, he is yet of opinion that the sound principle is not at present thoroughly carried out. He wishes to combine an incision that shall not exceed a fourth of the circumference of the cornea, with a freedom of exit for the lens that shall render the use of traction instruments exceptional—as exceptional, to use his own phrase, as the use of forceps in labour. He aims also at a plan of section that shall reduce to a minimum the number of cases in which loss of vitreous occurs; and he seeks to leave the ciliary border of the iris intact. He thinks Von Graefe's section objectionable on account of its steepness, of the direction given to it by turning the edge of the knife forwards; and he sees in the complete iridectomy a frequent cause of complications that arise from tags of iris becoming entangled in and adherent to the angles of the wound.

As the result of various experiments, Dr. Weber arrives at the conclusion that the best section for a full-sized lens is one exactly in the margin of the cornea, and in the plane of the margin, of such dimensions that its angles shall be 9 millimetres apart when its centre gapes to the extent of 4 millimetres. All operators know that the ordinary flat lance-knife cannot be kept in the corneal margin; and Dr. Weber has designed a modification of it by which this difficulty is overcome. His knife bears a general resemblance to the bent lance-knives commonly used for scoop extractions, but differs from them in several points of detail. The triangular blade is bent at an angle of 120° to the shaft, and is 10·25 millimetres in length, so as to admit of being thrust home in an eye of which the cornea is 12 millimetres in diameter. The blade is 10 millimetres broad at a distance of 6·5 millimetres from its point; retains the same breadth for 2 millimetres further back, so as to render the external and internal corneal wounds equal in length; and then diminishes to the shaft, so as to facilitate withdrawal. The blade thus bears some resemblance in shape to the heart on playing-cards. It is also concave from side to side, the concavity looking backwards, and the curve having a radius of 10·719 millimetres. With such a knife Dr. Weber states that it is possible to make an incision that shall be in the same plane as, and wholly coincident with, the margin of the cornea. He chooses the lower, or lower and internal part of the circumference, draws out the iris with a hook and cuts off a little of the pupillary margin only, lacerates the capsule with great care and nicety, and then, by pressing back the posterior lip of the wound with the flat of a scoop, and by making a little counter pressure, at a point opposite the centre of the incision, with the forceps by which the globe is held, he finds that the lens usually glides out with great facility. For more exact details of the proceeding we must refer to the original paper.

There can be no doubt, we think, that Dr. Weber has accurately stated a very important problem, and one worthy of the utmost attention from ophthalmic operators. How far his own solution of it is the best that can be furnished, time will show. But at present, taking large numbers, and taking skilled and unskilled operators together, it is questionable whether the use of traction instruments does not counterbalance the advantages of a corneal wound that is too small to gape spontaneously, or to produce sloughing from interrupted nutrition. Dr. Weber justly says that the results obtained by any one surgeon are not a trustworthy criterion of the value of his method. They are the results of the *operator* as much as of the *operation*. Hence, in estimating the danger of using traction instruments, we must not dwell too much upon the fact that some persons are able to use them without danger, but must consider their probable influence upon the success of beginners, or of surgeons who operate but seldom. Von Graefe states that he is now able to dispense with his traction-hook in most cases; but there can be no doubt that his steep incision leaves the vitreous body with only a minimum of defence, and that his complete iridectomy is attended by the risks that Dr. Weber assigns to it. Dr. Weber states, moreover, in a post-script, that Von Graefe has himself lately abandoned the very steep incision, and modified the kind of pressure by which he promotes the exit of the lens. The subject is one on which there is still much to learn; and we commend Dr. Weber's thoughtful and suggestive paper to the careful consideration of operators.

Medico-Chirurgical Transactions. Published by the Royal Medical and Chirurgical Society of London. Vol. L. pp. 649. London: Longmans. 1867.

THIS is the largest volume of the "Medico-Chirurgical Transactions" ever published; and includes, in addition to the ordinary papers, a valuable report by a scientific committee of the Society upon the "Hypodermic Method of introducing Drugs into the System." The volume contains twenty-three papers, some of them of considerable merit, and some of most unreasonable length. However interesting the study of cholera and its treatment may be, we cannot think it to have been necessary for Drs. M'Cloy and Robertson to have narrated so many cases as to occupy over sixty pages, the majority of which are in the tabular form. An elaborate paper by Dr. Ballard "On the Influence of Weather and Season," is equally lengthy, and has, in addition, seven large coloured diagrams of the most complex character; whilst a paper "On the Temperature and Urine in Typhus Fever," by Mr. Squarey, occupies more than eighty pages, and has eighteen diagrams appended to it. A very valuable paper, by Dr. Dickinson, "On Amyloid Deposit," finds its place in the volume; and "Cases of Poisoning with Phosphorus," by Drs. Habershon and Hillier, will be perused with interest by toxicologists. Aneurism and allied subjects are well illustrated by the papers of Mr. Birkett, Mr. Lee, and Dr. Beale; and by Dr. Cockle, who has contributed some important records to the difficult subject of aneurisms of the root of the neck. The diseases of the nervous system are well represented by Mr. Lockhart Clarke and Dr. Hughlings Jackson ("On a Case of Muscular Atrophy"); and by Dr. Bastian, who contributes a valuable paper "On a Case of Concussion-lesion, followed by general Muscular Atrophy."

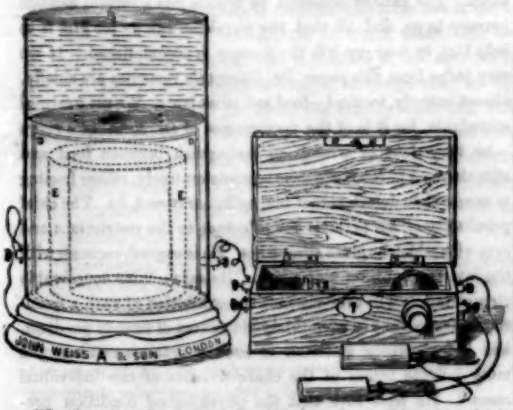
The ruling authorities of the Royal Medical and Chirurgical Society are known to be very tenacious at the present time that no paper shall be published in their "Transactions" which has appeared in any form—no matter how casually or incompletely—elsewhere. We would ask, then, how a paper by Mr. Charles Moore found admission, which is a report of two cases of Periodical Inflammation of the Knee; one of which was the subject of a clinical lecture, embodying all the remarks appended, and published by that gentleman in THE LANCET of April 30th, 1864? Again, a record of cases subjected to syphilisation by Mr. James Lane and Mr. Gascoyen forms a contribution of some fifty pages; but this same subject, and twenty-one of these very cases, formed the basis of a paper read before the Medical Society of London on the 18th of December, 1865, which was reported at length, with a discussion of considerable interest, in THE LANCET of Jan. 13th, 1866. We find no fault with the admission of these papers; but would suggest that the rule which is made to apply to ordinary Fellows of the Society should in fairness have an equal application to those who rule its decisions.

New Inventions
IN AID OF THE
PRACTICE OF MEDICINE AND SURGERY.

PATENT REVERSIBLE GALVANIC BATTERY.

THE inconvenience of filling and emptying the cells of galvanic batteries each time they are used, as well as the impossibility of carrying them about when charged, have always been a serious drawback to their more general employment. Hence the more frequent use of the electro-magnetic apparatus, which has the disadvantage, however, of requiring a second person to work them.

FIG. 1. FIG. 2.



We therefore draw attention to a new form of battery which has just been introduced by Messrs. Weiss and Son, and of which the above is an engraving. It consists of what Messrs. Weiss and Son term a reversible battery, Fig. 1, connected with an induction apparatus, Fig. 2.

The engraving shows the battery in action,—that is, with the fluid surrounding the elements; simply reverse it, and the fluid flows into a compartment below the diaphragm, or false bottom (CC). This diaphragm prevents the fluid coming into contact with the elements when carried about, and if it is desired to send the apparatus to any distance, a plug can be screwed into the aperture of the former. To fill the battery it is only necessary to unscrew the cap (A).

The elements depicted consist of a zinc and a carbon cylinder, and the fluid employed is bichromate of potash and sulphuric acid; but the reversible cells may be used with other elements. We are aware that in Stöhrer's battery the zinc plates may be drawn up, and thus obviate the necessity of taking the fluid out of the jar; but it does not afford the convenience of portability.

Messrs. Weiss and Son also employ the same principle for constant batteries, in which a number of elements are required, as well as for cauterization batteries.

CURTIS'S IMPROVED INHALER.

THIS inhaler possesses the advantage of being much more portable than any that are at present in use. It is of extremely dwarf shape, and provided with an elastic air-tube, so that the patient can conveniently use it when in a reclining position, as the instrument may rest on the pillow without danger of upsetting. The objection to the use of cork in other inhalers—namely, that it is liable to swell or contract, and so make the vessel useless—is obviated in Curtis's inhaler by the substitution of an india-rubber ring. This apparatus is also well adapted for the administration of chloroform, ether, creasote, and other active and volatile substances; as, from its construction, the exact quantity required may be inhaled.

Having these advantages, and being sold at the low price of 7*s.* 6*d.*, there is no doubt that it will be extensively employed. It is manufactured by Curtis and Co., of Baker-street.

READING'S NEW INVALID COT-CARRIAGE.

THE new invalid carriage, built by Messrs. Reading, coach-builders of Riding House-street, Langham-place, is well worth inspection. It has the appearance of a roomy private omnibus. The interior is fitted up on the one side with a seat for four persons; on the other is a suspended couch, with a patent elastic foundation, so constructed that the patient can be shifted to any position desired, or be lifted out and into the carriage without the least discomfort or trouble, the back part of the vehicle opening for the purpose. Special fixtures keep the couch and the body of the carriage, either singly or both together, from motion, if desired, as in railway travelling. The carriage is provided with patent noiseless wheels; in addition, the interior is furnished with washing conveniences, a closet, and a large reading lamp. It is roomy, well lighted, and well ventilated—in fact, the carriage is convenient and comfortable, and by far the most perfect of any hitherto built.

IODIDE OF POTASSIUM IN LARGE DOSES.

To the Editor of THE LANCET.

SIR,—Will you allow me to add my testimony to the very high value of large doses, such as twenty to twenty-five grains of iodide of potassium taken three times a day in water, in the treatment of tertiary lesions of syphilis. In deep ulcerations of the pharynx, and in inflammations of the periosteum and bone, it seems very frequently indeed to be most efficacious. Only the other day, a patient at the Metropolitan Free Hospital, whose ulcerated and deeply fissured tongue had many of the appearances of epithelioma, recovered in three weeks by taking twenty grains of the salt three times a day. In Paris this fact is better known than in London, and is taught by M. Ricord, Dr. H. Fournier, Dr. Dolbeau, and others. But I trust that Sir H. Thompson's letter may make this valuable fact more widely known, since we have so much of that terrible disease, syphilis, to contend with.

I remain, Sir, your obedient servant,

Southampton-row, W.C., Dec. 1867. C. R. DRYSDALE.

CONTAGIOUS DISEASES ACT, 1866.—On the 6th inst. a meeting was held at Chatham, where this Act has been two years in operation, to consider the advisability of extending it to the civil population of large towns. The meeting was attended by most of the beneficed clergy and gentry of Chatham, Rochester, and Stroud, and by medical officers of the army and navy. The Rector of Chatham, the Rev. A. R. Webster, M.A., filled the chair. After a discussion, in which much benefit was clearly shown to accrue from the Act, and that it does not deteriorate public morality, a resolution was passed in favour of its further extension to all large towns in the United Kingdom.

THE LANCET.

LONDON: SATURDAY, JANUARY 11, 1868.

GLASGOW physicians speak with a terrible authority on the subject of typhus. We should never lose an opportunity, therefore, of studying their views of the disease. We have before us a paper by Dr. RUSSELL, Physician and Medical Superintendent of the Glasgow Fever Hospital, reprinted from the *Glasgow Medical Journal*, and which will well repay a reading by all persons who wish to acquaint themselves with the results of a large observation of this disease. The basis of Dr. RUSSELL'S conclusions is a broad one. From the 25th of April, 1865, to the 1st of May, 1867, there were 1538 cases of typhus treated in the Glasgow Fever Hospital. And it is on the strength of the statistical facts of these cases, and of the impressions produced on Dr. RUSSELL'S mind by watching them individually, that he writes. The breadth of this experience may be judged of by contrast. Dr. TODD, some time before his death, handed over to Dr. MURCHISON all his hospital case-books, extending from 1840 to 1858, and these included only 108 cases of typhus. There are two or three other features of Dr. RUSSELL'S fever experience, besides its extent, which give value to his views. These have reference principally to the success of the treatment pursued in the Glasgow Fever Hospital. The average mortality bears a very favourable comparison with that of other institutions, being 11·4 per cent. The mortality of Dr. TODD'S cases was 25 per cent. Of 18,592 aggregated by Dr. MURCHISON, the mortality was 18·78 per cent. The comparison is particularly favourable at the more advanced ages, which is a point specially interesting in connexion with the practice pursued by Dr. RUSSELL. At ten out of fifteen periods of life the mortality from typhus was less than in the Glasgow Royal Infirmary. Not only is the average mortality of the Glasgow Fever Hospital thus creditable, but the average residence in hospital is from a week to ten days less than that of patients in any other hospital. We cannot, therefore, but feel greatly interested in knowing the general views and treatment of a physician so largely experienced, and withal so successful, in the management of one of the diseases which still infest our large cities.

Our principal purpose is to give a general notion of Dr. RUSSELL'S therapeutical views of typhus. We only premise that this paper is essentially statistical in its character rather than clinical. Dr. RUSSELL does not believe in any inferences from individual cases as to minute points of practice, but in great aggregate results. There may be differences of opinion as to the best method of arriving at therapeutical conclusions. We may not be able to resist the impression that a knowledge of the individual cases in Dr. RUSSELL'S practice would induce us to differ from him as to the applicability to some of them of his general principles of practice. There are many details in regard to which we should like to have a comparison between his cases and those of others—e. g., the frequency of bedsores, which do not come out in manifold tables and huge statistical statements. But we cannot think that the absence of these details greatly diminishes the validity of Dr. RUSSELL'S general conclusions. Typhus is such a specific disease, and so sure of careful differentiation in the Glasgow Fever Hospital, that there is not the least doubt in regard to diagnosis, which vitiates most statistics of disease. Practically assured, then, of accuracy on this point, knowing that the disease was less mortal than in the infirmary of the same city, and that whatever the secondary consequences of the fever, they were of so slight a nature as to allow of the patient leaving the hospital a week or ten days sooner than the usual period of leaving, we cannot but greatly prize the information which Dr. RUSSELL has to give us, albeit it is not clinical.

Like many of the physicians who have seen much of fever, Dr. RUSSELL'S list of remedies is a very short one. His view of fever is simple. Nothing we yet know will suffice to cut it short. The patient attacked by typhus has a certain definite journey to go, and all that the physician can do for him is to help him to bear up till the journey is accomplished. If we may judge from this paper, Dr. RUSSELL'S remedies are chiefly, almost entirely, twofold—food and stimulants. We say food *and* stimulants, for it is of the very essence of Dr. RUSSELL'S views—be they right or wrong—to distinguish between food and stimulants. The food, which he administers freely, rather leaning to excess than defect, is beef-tea, milk, arrowroot, &c. The chief peculiarity of his practice has reference to the restrictions and care with which he gives stimulants. He is at great variance with the late Dr. TODD on this point. He says: "No conceivable circumstances will ever warrant the exhibition of such a quantity as forty-eight or even thirty-six ounces of brandy per diem, and the aggregate statistics of such a practice will bear the most delicate traces of the characteristics of the individual cases." He feels sure that the physiological condition produced by such quantities must have been that of narcosis. It is difficult to state in a few words the general principles which guide Dr. RUSSELL in the use of alcohol in fever. He is very explicit in disapproving all rules of thumb and routine in the administration of stimulants:—

"I have made various attempts to formulate some phenomena or class of symptoms which demand stimulation—e. g., a pulse above 120,—but have abandoned them all. The only circumstance which I still regard as a decided occasion for the use of stimulants is irregularity of pulse; and it is, on the whole, from the heart that nearly all true indications are to be derived, certainly not from functional nervous derangements."

It would be interesting to know if Dr. RUSSELL has made use of the sphygmograph. We infer not, from the fact of no allusion being made to it. This instrument might disclose failures of the circulation earlier and finer than those detected without its aid, and so indicate an earlier use of stimulants. It is really in connexion with the evidence afforded by this instrument that this whole question will have to be reconsidered. There is a concurrence of opinion to the effect that the indications for the administration of stimulants in fever are to be looked for in the condition of the circulation, and as affording the first and the finest information on this point it is possible that the sphygmograph may really be of the greatest use. It would be easy for Glasgow physicians to determine the value of it in fever, and to say how far the information it affords accords with, and might to some extent supersede, the indications supplied by various and complex symptoms. Of 1538 cases, 645 at some period or other received stimulants, or 42 per cent. Dr. RUSSELL explains that this per-centage is nearly uniform in all hospitals; and that difference of opinion turn

chiefly upon the time at which to begin stimulants, the amount to be given, and the time for discontinuing. Taking all recoveries of all ages together, the daily dose was about three ounces and a half of wine, and one ounce of whisky. In the fatal cases the doses are much larger, but still far short of what our neighbours call "la portion de TODD." The maximum of all ages and of both sexes is eight ounces of whisky per day, to males between thirty and thirty-four. But in general the dose was to males from one to two or two and a half glasses of whisky, with one glass of wine; to females, from one to one and a half glasses of whisky, and one to two glasses of wine. The great point insisted on by Dr. RUSSELL is that the amount of stimulation, and all other phenomena, either of the disease or its treatment, are to be studied in relation to the day of the disease. Typhus is emphatically a disease of days; and the exact stage of the disease at which stimulants are needed is found to be a valuable indication of the severity of the case, and a very important element in prognosis. In 451 patients the duration of the fever was exactly made out, with special reference to the beginning of the need for stimulants, to the occurrence of crisis, death, &c. A marked coincidence of important days is thus determined, which must be studied in Dr. RUSSELL's paper. We can only give his conclusion on the practical point of stimulation.

"Stimulation, beginning very early or very late in the fever, is in both cases apt to prognosticate a fatal issue. The former class is composed of those whose strength fails before the journey is well begun; while the latter, few in number however, comprises such as pass through the fatigue of the fever, but arrive at its close with some serious local lesion—such as pneumonia, pleurisy, gangrene, bed-sores, &c."

It is difficult, as we have said, to gather from a paper so essentially statistical in its character a very clear idea of the symptoms which determine the first administration of stimulants, their dose and their continuance. We only gather that these have reference rather to the circulation than to the nervous symptoms. A merely statistical view, however, of a very large number of cases of so definite a disease, by one specially accustomed to observe it, might be expected to justify confident generalisation as to the bearing of certain special conditions of the patient on the need of stimulation. And so it proves. Among these are age, sex, pregnancy, lactation, abortion, previous habits. Some of these conclusions are full of physiological interest: such as the very characteristic weakness and anæmia of suckling women; the exceptional weakness of certain young ages, as that from fifteen to nineteen; &c. But we cannot dwell on these details. We can only bespeak attention to them, and to the whole of this authoritative statement. It may be that the vital condition of the poor in Glasgow is better than that of corresponding classes in London; that a population which revives its drooping powers with whisky is a stronger one, and fitter to brave typhus, than one which has frequent recourse to gin. This is all doubtful; but, whatever the truth may be, we have in Dr. RUSSELL's paper a valuable contribution to a study of the natural history of typhus, and important data for its good management.

WE would direct the attention of our readers to the able papers on the "Sanitary History of the British Army in India, Past and Present," the first of which appeared in our last number. These may be correctly termed Contributions to State Medicine. No one probably is so competent to handle the subject in a statesmanlike spirit as Sir RANALD MARTIN, for the simple reason that no one else possesses his special qualifications.

We take this opportunity of recalling the important services which Sir RANALD MARTIN has already, in years gone by, rendered to the public in furthering reforms bearing directly upon the prosperity and health of the community, and especially the army. Sir RANALD took an active part in agitating successfully the question of granting military rewards and distinctions to medical officers. His exertions in the Towns Commission inquiry secured the appointment of Medical Officers of Health in England and Wales, under the Health of Towns Act. The story of this reform will be found in THE LANCET of Jan. 31st, 1857. Sir RANALD also advocated the special appointment of sanitary officers for armies; and first suggested and planned, before the Royal Commission of 1857, the present system of administering the Army Medical Department. At the present time he counsels the more complete occupation of the mountain ranges throughout India—the great question upon which the safety and the preservation of the efficiency of the British garrison there mainly depend.

It is of the first importance to the maintenance of imperial interests in the East, as Sir RANALD says, that everything in the life of the soldier, physical, moral, social, and military, be thoroughly examined and ascertained, in order that the causes of his decline in health, *at the earliest and most remediable stage*, may be justly appreciated. And we think he has gone straight to the mark in pointing out the defective state of our information on some matters which the statistical system of records does not even touch. Of the accuracy and value of the facts (so far as they go) embraced by that system, and of the conclusions deducible from them, there can be no doubt: but it is an imperfect knowledge, after all, that is obtained; and in this way—that it disregards and leaves unregistered those gradual deteriorations in point of health and constitution which an Indian climate induces in our European soldiers. The ratios of sickness and mortality of a regiment at a particular station may be given with perfect accuracy; but we must likewise possess something like an estimate of the physiological actions of the climate of different stations, and to do this we must supplement our sick reports by health reports. Because the causes at work in inducing such deteriorations of health are gradual in their progress, they are not on that account less certain in their effects. The low standard of health produced in one station may not, perhaps, be clearly traceable in the sick list, but it operates by engendering a susceptibility to the acute diseases of another station.

And we think that we perceive in all this very cogent reasons why the presidents of the Sanitary Commissions in the different Presidencies of India should be members of our profession. To recognise and estimate aright the insidious and slow operation of climatic and other allied causes in engendering that deterioration of health which adds not even a decimal to the statistical tables, because it does not lead at once and directly to the hospital, requires a skilled eye and a refinement of observation which no mere military or civil president, however able in every other respect he may be, can be expected to possess.

We have understood that an effort has been made of late, in

the Presidency of Bengal, to centralise all the sanitary and statistical reports of the British army in India in the hands of the Sanitary Commission presided over by Major MALLESON. We may say at once, we hope that it will not be effected. For what, practically, does this amount to, except subordinating the Medical Department to the Sanitary Commission? The legitimate duties of the Medical Department in India are to note the actual amount of disease, and to discern the signs of the earliest deviations from health in a given body of men; and then to study the relation of these to causes which are remediable in their nature. Medical officers, who can take personal cognisance of these things through the medium of their senses during their inspections, are the proper persons, unquestionably, to submit the necessary sanitary recommendations and suggestions direct to the Government they serve, and not through the channel and by the instrumentality of any sanitary commissioner. The Government would not, as it certainly should not, extend more weight to the recommendations of a commissioner obtaining his information at second hand, than to the chief medical officer representing his department in each presidency. If medical officers are the best and fittest persons to act as the presidents of such boards on these accounts, there are, besides, other reasons of a minor kind, but of even a clearer description. Many questions require to be determined by a board or sanitary commissioner, which a skilled medical education alone fits a man to answer. Take the question of regulations affecting the issue of rations, and meat in particular. The immature ova of tapeworm and other parasites are abundantly present in the meat supplied in India. Who can detect these if not the medical officer? And on whom should the Government rely if not upon its medical department for regulating the examination and issue of meat, with the view to the prevention of tapeworm among our European troops in India?

THE attention of Government ought certainly to be directed to a complaint which is very reasonably made by our Irish correspondent, in his letter published in THE LANCET of last week. It appears that the Irish public lunatic asylums are very ill provided with resident medical officers. Whatever may be the number of inmates,—and this, it appears, varies from 740 in the Richmond down to 130 in the Carlow Asylum, and whatever may be the number of visiting physicians appointed to attend upon them, by some unaccountably perverse rule, no more than one resident physician is ever allowed to each establishment. There is no need to discuss the propriety of this arrangement; the common sense of the profession, and one would suppose of the public equally, must condemn such a state of things. It is plain that upon the resident medical officer, far more than on the visiting physician, must fall the responsibility of treatment in difficult cases, and that on his skill and hourly watchfulness must mainly depend the chances of cure in critical, and especially in acute, cases. To overburden the resident physician with work and responsibility is, therefore, to do the maximum of injury to the patients. And, certainly, to suppose that any one medical resident can effectively supervise 750—or for that matter 350—insane persons, would be to go a long way towards proving one's own lunacy. Undoubtedly, in all but the very smallest asylums at any rate, there should invariably be an assistant, as well as a principal, resident medical officer. To say the least of it, there must be times when an active asylum physician must need relaxation, or must needs be absent on private business, and it is absolutely indispensable to the good management of a large medical establishment that some one should be on the spot to assume his duties, who is already familiar to some extent with the cases of the patients, and is also accustomed to the routine of the asylum, and able to make the wheels of discipline work smoothly. For this purpose an assistant, trained under the eye of the principal resident physician, is exactly what is wanted. But besides this there is another and most practical point suggested by our correspondent—namely, that if we are to keep up the supply of men who shall be properly qualified to take the supreme charge of any of these public asylums—even of one with only 150 beds—we must have such posts as that of Assistant-resident, in which men may be gradually trained into fitness for the responsible office of managing the whole medical discipline of such places. It is of supreme importance, as regards the scientific education of young alienist physicians, that they should not commence active practice by being pitchforked suddenly into a place of irresponsible power (medically speaking), where the fullest liberty would be allowed them for airing those *à priori* notions to which all young men are liable, but which specially beset young men who have to deal for the first time with a very difficult and mysterious subject. And we may add one more consideration—namely, that if the day is ever to come when the obvious and common sense step of utilising public asylums as schools for the study of lunacy shall be adopted, it will be found utterly impossible to employ the resources of these establishments for clinical teaching so long as they are insufficiently supplied with resident officers. Nothing but a sufficient supply of resident medical officers, to ensure that individual patients are *closely watched*, as well as cleverly treated, can make the histories of their cases sufficiently accurate to be really valuable in teaching men who have yet the alphabet of alienist medicine to learn.

Medical Annotations.

"Ne quid nimis."

THE HEALTH OF THE MERCANTILE MARINE.

THE Duke of Richmond's Act, which took effect from the 1st of the present month, is now in full working order, and both inspectors and surveyors are busily engaged in carrying out its provisions. Very little, if any, lime-juice has as yet passed under official inspection; but a large quantity of good lemon-juice has already been certified, mixed, and packed in this port during the past week, and the demand for it is so large that the St. Katharine's Dock Company have been compelled to add to the space originally appropriated to the work of bottling and packing. But the Customs officers, and all other officials engaged, have shown a most praiseworthy alacrity in carrying out the organisation of this new scheme; and it is believed that no serious delays have occurred to affect the commercial interests of the shipowners. Indeed, it is plain that the latter are glad to be spared the responsibility of shipping, for the use of their crews, antiscorbutics, as to the quality of which, up to the present time, they must have been entirely ignorant; and those interested in this question must now wait and watch for the result. This result will mainly

depend on those who are officially connected with the working of the Act; and if, when eighteen months or two years have elapsed, the sanitary statistics of our mercantile marine do not show a very large diminution of scurvy, it will be positively incumbent on the Board of Trade to legislate for scales of diet. A paragraph that appeared in the pages of the *Pall Mall Gazette* several days ago stated that much misapprehension exists on this question, and rightly observed that the Board of Trade have no power whatever to enforce any particular scale of rations for the crews of merchant ships. There is no doubt that a proper diet would at once render the use of lime- and lemon-juice unnecessary, and this opinion was strongly enunciated in THE LANCET many months ago. But, until the working of the new Act has been fairly tested, our shipowners will withstand any more sweeping compulsory enactments, and (rightly or wrongly) think that the systems of Government surveillance are too hard upon them already. Meanwhile it would be dangerous and futile to recommend any other one antiscorbutic in lieu of lime- or lemon-juice. Potatoes, beer, wine, sorrel, liquor nasturtii, and dried fruits are all good and useful prophylactics; but we cannot show, for any one of them, statistical proofs of usefulness that extend over the past eighty years. This much can be stated of the article which the Board of Trade still continues to adopt, and the good quality and preservability of which it now ensures to owner, captain, and crew. The amended Scale of Medicines published under the new Act is a thorough revision of that formerly in force, and appears to be well suited to the requirements of a man who, without any professional knowledge, is often compelled to prescribe for suffering humanity afloat. But the usefulness of the "Scale" must mainly depend upon the "Guide" that is to accompany it, which will, as we are informed, be published in a few days, and of which we hope to give an early notice.

THE NEW BOARD OF GUARDIANS FOR SHOREDITCH.

WE have received intelligence respecting the possible result of the impending formation of a new board of guardians for Shoreditch, which is calculated to alarm everyone who desires to see the reforms which are so very much needed in the management of this parish (and especially of its workhouse) effected. The case of Shoreditch workhouse was one of the worst which our Commissioners exposed, and the abuses which they revealed there made a deep impression on the public. It would, indeed, be a lamentable proof of the failure of Mr. Hardy's Metropolitan Poor Act if the newly organised board of guardians should be so constructed as to provide for the continuance rather than the redress of the serious evils which we proved to exist. We regret to be informed that a manœuvre is in course of execution, with too great prospect of success, which would be well calculated to bring about this undesirable result. It is said that the obstructive members of the old board are, almost without exception, abstaining from seeking the suffrages of the ratepayers as candidates for election, but are endeavouring, not without hopes of success, to get themselves nominated by the Poor-law Board under the provisions of Mr. Hardy's Act, which were intended to supply an independent check on the ignorant parsimony of those guardians who might suppose it to be their main duty to keep the rates down to the lowest figure.

We must say that this report, which comes to us on respectable authority, sounds most ominous; yet, we cannot at present believe that the Poor-law Board will lend themselves to so unjustifiable a transaction. If there was one provision of the Metropolitan Poor Bill on which its author laid special stress, and on which sanguine members of Parliament and the public placed a fond reliance, it was the arrangement by which a considerable portion of each of the new guardian boards was to consist of persons who, from their independent station, and their known intelligence and benevolence, were likely to resist with energy any attempt to continue the vicious traditions of workhouse and pariah relief which have cast such deep reproach on the social policy of this country. These nominees were expected to be taken from the ranks of the county magistrates, gentlemen of fortune, and professional men. The latter class, and especially the medical profession, might have been expected to furnish most valuable recruits to the cause of that reform in Poor-law management which Mr. Hardy so sincerely desired to effect. If Lord Devon, as we earnestly hope and believe, is seriously bent on making the most of Mr. Hardy's Act, with all its imperfections which we have so often pointed out, he will certainly insist upon filling up the nominations for the Shoreditch board in strict accordance with the intentions which his predecessor so strongly declared in Parliament. The alternative course would really be too shocking to the public sense of political morality.

LABURNUM POISONING.

A CORRESPONDENT has forwarded to us an extract from the *Whitby Gazette* which relates a melancholy occurrence: the death of a child, six years old, from eating, or at least chewing, the bark of the laburnum tree. It is rather remarkable that so much ignorance of the poisonous properties of the common laburnum should prevail among the public; for as long ago as 1845, Dr. Christison, in his classic treatise on Poisons, gave a distinct and full account of the dangerous qualities possessed by all parts of the tree; and fatal accidents have several times since been produced by it. Of the bark (which was the fatal agent in the recent case) he says, that it appears to have been well known among the peasantry of the north of Scotland as a narcotic irritant poison; and refers to a case where it was feloniously administered with nearly fatal results. He also describes experiments on animals, in which he injected an infusion of sixty grains of the dried bark into the stomach of rabbits, when severe tetanic convulsions, followed by death in a minute or two, took place. These powerful narcotic effects are probably only produced by a large and concentrated dose; the ingestion of such smaller quantities of the poison as children would be apt to get by chewing a seed or two, or by gnawing the bark of the young twigs cut off the tree in pruning it, would be likely to produce death under symptoms of irritation of the stomach and bowels, with sickness, fainting, and collapse in the course of a few hours. Such was the case in the recent instance, which occurred at Boghole, in Yorkshire. The active principle, at least as far as regards the more powerful narcotic effects of laburnum, appears to be a brownish-yellow neutral extract, discovered by Chevallier and Lassaigne in the seeds, and which they named *cytisin*. As for the treatment of laburnum poisoning, we suppose that no rational means beyond the prompt use of the stomach-pump, and the administration of diffusible stimulants, can well be devised. The attention of the public ought to be directed to the necessity of stringent care being taken that children should not be allowed to tamper with any part of the laburnum tree. It is most dangerous for them to put either the flowers, the seeds, or the twigs into their mouths, all parts of the tree being highly poisonous.

HOMELESS CHILDREN.

PERHAPS no class has a larger acquaintance with this subject than is possessed by the members of our profession. It is to us a matter of the greatest interest to watch the prominence which so many questions of really vast social importance are attaining in the present day.

Attending some poor and industrious parent, the medical man has often to realise the prospect of a family being left destitute, and he cannot help forecasting the fate of that family—vagrancy, the workhouse, or, worse, the prison.

Subjects of social interest of this kind are really of more importance than many of the political matters which obtain, in their discussion, all the benefit which ability and publicity can give them. The amount of money expended in poor's rates and on charitable institutions in this country is enormous. If our Poor-law administration were only put upon a really efficient footing, and if the system of Poor-law relief were the best one attainable, there is no doubt that a far larger amount of benefit might be obtained. Meanwhile, many parents die leaving children unprovided for, and almost as many have not the means, and some, we fear, want the inclination, to educate them for honest employments. The consequence is, that the duty which should have fallen upon the parents devolves upon the State, and if it were rightly carried out, these children would be educated and employed for national ends. Our army and our navy are maintained with difficulty. We have no conscription such as continental nations possess, and yet we have demands upon us, in maintaining our supremacy in India and the colonies, such as do not fall upon those nations. If we are to maintain that supremacy in the future, there can be no doubt that the strain upon our powers will tax them to the utmost. We are not sufficiently alive to the importance of checking the present "waste" of population, and indeed of utilising it, for this is quite possible. Refuges for homeless and destitute children, training-ships, such as the *Chichester*, and other institutions of the kind, supply a need which has long been recognised by medical practitioners; and we venture to say that if the members of our profession had possessed more voice in the representative Government of this country, questions about pauperism, workhouses, provision for homeless children, and sanitation for the poor, would have occupied a more prominent position in the councils of the nation than they have done. As it is, we only express the belief of every thoughtful man in our profession that these are measures of the greatest importance to the health and vigour of this nation, and we heartily wish them every success.

THE CONTAGIOUS DISEASES ACT IN JAPAN AND CHINA.

WE learn, on the authority of the *Army and Navy Gazette*, that the senior naval and military officers in Japan, finding that nearly one-half of the per-centage of sickness on that station arises from enthetic diseases, have conferred with our consul, Sir Harry Parkes, with the view of getting some prohibitive regulations enforced. If the governor of Nagasaki consent, as it is expected he will, the European sanitary police system will be carried out, and a Lock hospital established under European medical men.

We understand, moreover, that it is at present under the consideration of our Government, in connexion with the colonial authorities, to establish a similar system in China. The diseases to which we allude frequently assume a severe form in these climates, and the loss of health and efficiency in both the naval and military services is very deplorable. If anything can be effected towards the prevention or mitigation of these diseases, an infinite amount of good will be done; and we know of no other expedient by which the evil can be met.

UNIVERSITY COLLEGE, LONDON.

A MEETING of past and present students of the medical department of University College was held on Monday last to express their sympathy with Dr. George Harley, F.R.S., professor of Medical Jurisprudence and physician to the hospital, in the painful illness which had necessitated his recent retirement from active professional labours, and their congratulations on his return to his duties. Mr. Bruce, having been requested to take the chair, briefly stated the objects of the meeting, and called upon Mr. Squarey to move the first resolution—"That this meeting desires to express its sincere sympathy with Dr. Harley during his painful and protracted illness, and begs to offer him its cordial congratulations on his recovery and his return to the active duties of his profession." Mr. J. S. Cluff seconded the resolution, which was also spoken to by Dr. Alfred Wiltshire, and carried by acclamation. A deputation was then appointed to convey to Dr. Harley this very gratifying expression of sympathy and respect.

HOSPITAL NURSING.

WE are able, on the best authority, to contradict a statement which appeared in a contemporary last week, to the effect that the superintendence of the nursing department at King's College Hospital by the ladies of St. John's House will cease in the middle of the present month. It is perfectly true that the lady-superintendent and other ladies hitherto attached to St. John's House are about to sever their connexion with that establishment, and, as a matter of course, with the hospitals which the institution undertakes to supply with nurses; but the relation between St. John's House and King's College and Charing-cross Hospitals remains exactly what it was, and the nursing will be conducted as heretofore. Changes have necessarily from time to time taken place in the staff of ladies attached to these hospitals; and the present change is one only of degree, and is due to matters of detail in dispute between the late lady-superintendent and the Council of St. John's House, in which the committees of the respective hospitals have no part or interest.

It is satisfactory to find that the two great public charities we have mentioned are in no way affected by the alteration; and that the improvement which has been visible in the wards of King's College Hospital for the last twelve years, and which has done not a little to spread improvement among English hospitals, is not in any danger of suffering deterioration. Whilst acknowledging the great skill of the late superintendent of St. John's House, we feel bound to protest against that tendency to exercise authority unduly which undoubtedly characterised her reign, and which not seldom led to discomfort and inconvenience. The head of a body of nurses should of necessity be invested with power, but must be in subjection to the medical and lay authorities of the hospital.

We understand that changes in the secretarial department of King's College Hospital are imminent, which will, no doubt, prove beneficial; and rumours of possible vacancies in the medical staff are prevalent, to which, however, we cannot at present more particularly refer.

CORONERSHIP OF WEST MIDDLESEX.

MR. JAMES BIRD, the coroner for the Western Division of the county of Middlesex, died on the 6th instant. There is, consequently, a vacancy for the coronership of that district. This affords an excellent opportunity for some medical man of established scientific and professional position to offer himself to the freeholders. There can be no doubt that the members of the profession have the power, if they exert it energetically, to elect a medical coroner. Mr. Bird, when elected some years since, possessed an amount of local interest which it is not likely that any lawyer who makes the attempt to succeed him can command. The medical opposition to him on that occasion was conducted so feebly, and with such an absence of the knowledge of electioneering tactics, that it would have been injudicious for the medical candidate to have gone to the poll; though, had he done so, he would have polled a respectable minority. The late Mr. Wakley was elected coroner for Middlesex triumphantly under circumstances far more adverse to the profession than those which at present obtain in the Western Division of the county. We trust that our brethren in this district and in the metropolis generally will immediately take counsel together, select a fitting candidate, and exert all their influence to promote his election. THE LANCET, which

on all occasions has lent its aid to the election of a medical coroner—it need not be told with what success,—will certainly not be remiss now. We are again prepared for the contest, and already we have the names of several candidates before us. But as we have some experience by which to speak, and are resolved only to speak with effect, we would lay it down as a first and essential principle that success can only come from the closest combination of effort. If two men of commanding position are put forward and supported, the attempt will be hopeless. Two committees—one local, the other metropolitan,—promptly instituted and working together in support of one candidate of recognised reputation, will succeed: nothing less.

HONOURS CONFERRED UPON FOREIGN MEDICAL MEN.

WE have noticed in recent numbers of foreign journals the record of various honours conferred upon members of the profession, and we gather them under one head for the satisfaction of our readers, to whom everything that concerns the social status and welfare of the medical community is doubtless of interest.

In France, we note Dr. Conneau's nomination to a seat in the Senate, though he owes this exceptional distinction to circumstances unconnected with professional standing. Dr. Conneau is not the first medical man upon whom the honour of the Senatorship has been conferred in France. Cobanis, the author of a well-known work, "Les Rapports du Physique et du Moral," and Berthollet, the illustrious chemist, to whom the town of Annecy has recently erected a statue, both occupied seats in the Senate during the first Empire. Under Louis Philippe, M. Double, an eminent obstetrician, refused the peerage which was offered him, because it was made a necessary condition that he should cease to practise on becoming a peer. The late Rayer, who, in addition to high professional standing, enjoyed great credit at Court, would in all probability have been called to the Senate had his life been prolonged; and it is said that M. Nélaton will soon be chosen for that dignity.

At Montpellier, a medical jubilee has been celebrated to congratulate M. Bérard, professor of chemistry at the Faculty of Medicine, upon the achievement of his fiftieth year of professorship. At a banquet which took place on the occasion all the notabilities of the town were present, and a letter was read in which the Minister of Public Instruction informed the venerable professor that he had been very happy to obtain for him the Cross of Knight Commander of the Legion of Honour. We may also add that M. Michel Lévy, professor at the Val-de-Grâce, and Inspector of the Sanitary Service, has just been nominated Grand Officer of the Legion of Honour, a dignity which but one other member of the medical profession enjoys in France—we mean M. Nélaton.

In Austria, the name of Rokitansky figures on the list of the last promotion to the High Chamber; and in Italy, M. Lanza, the newly elected president of the Lower House, is a medical man.

We may conclude with a tribute to the dead, in mentioning that the statues of Laennec and Dupuytren will shortly be erected in their native towns.

THE POOR-LAW INQUIRY AT CHEADLE.

A POOR-LAW inquiry was held by Dr. Edward Smith, and Mr. A. Doyle, Poor-law inspector, at Cheadle, on Thursday, Jan. 2nd, relative to alleged improper treatment of a pauper in the workhouse there, under the care of Dr. Webb, the medical officer. We have read the full report of the attempted substantiation of this accusation with the greatest pain. The coroner for the district had before received a letter from a medical man residing in Cheadle—Mr. Mackenzie—alleging that the deceased "had been most foully treated in the union;" that she died "from bed-sores which were the result of improper treatment and neglect;" that drugs had improperly, or with improper motives, been administered to her; and, finally, "that an inquest on the body would prove that her life had been shortened by ill-treatment." These statements were controverted at the inquest, especially by the evidence of two medical practitioners — Mr. Herbert, of Uttoxeter, and Dr. Allen, of Longton. The coroner, in summing up, characterised the language used by Mr. Mackenzie as most unjustifiable, and the charges as groundless; and declared that the deceased had been treated with much kindness. The jury concurred in this view, ascribing the death to natural causes. Mr. Mackenzie, at this inquest, took upon himself the task of cross-examining witnesses, and was reproved by the coroner for his demeanour. At the inquiry at the workhouse before the Commissioners, other charges of neglect were negatived by the evidence of Mr. Sutton, Mr. Tomkinson, Mr. Webb's son (all medical men), and the matron of the workhouse. The rector of Cheadle indulged in statements which he did not substantiate, and was compelled to admit that he was guided by hearsay.

Mr. Mackenzie's attitude in this matter towards a professional brother, read in the light of facts as stated in the local journals, is difficult of satisfactory explanation, and will, we think, be condemned by the profession.

MEDICAL OPHTHALMOSCOPY.

THE present number of the *Medico-Chirurgical Review* contains an important article on "Medical Ophthalmoscopy," which we strongly commend to the attention of practitioners. The labours of Galezowski, Bouchut, John W. Ogle, Hughlings Jackson, Russell, Clifford Allbutt, and Teale, are brought under review. The writer shows forcibly and clearly how valuable the ophthalmoscope is to the physician. He says:—"Every medical school is now bound to teach its students the use of the ophthalmoscope as carefully as the use of the stethoscope is taught. But it is not easy for physicians who have left the schools, and are engaged in practice, to take up a new instrument which requires much skill in using. We can assure our readers, however, that a few hours spared for this work are very well spent." Dr. Hughlings Jackson some time since remarked:—"The physician is quite as much indebted as the ophthalmologist to Helmholtz. Defects of sight of all kinds occur so often in affections of the nervous system, that it is not too much to say that to the student of these diseases, a knowledge of amaurosis, both in the widest and lowest, and narrowest and most precise use of the word, is of more importance than a knowledge of any other class of symptoms."

THE VICTIMS OF THE CLERKENWELL OUTRAGE.

HIS Royal Highness the Prince of Wales paid a visit to St. Bartholomew's Hospital on Tuesday last to see the sufferers from the recent outrage at Clerkenwell prison who are now in its wards. The Duke of Sutherland, Major Teesdale, and others accompanied the Prince, who made every inquiry of the patients relative to their present condition, and their personal knowledge of the explosion. His Royal Highness was conducted through the wards by Mr. Foster White, Dr. Farre, Mr. Paget, and Mr. Holden.

The first report of the Committee of Relief, presided over by the Rev. R. Maguire, has just been published. It conveys thanks by special resolution to the treasurer, to Mr. Holden and the medical staff of St. Bartholomew's Hospital, to Mr. Hill and the officers of the Royal Free and King's College Hospitals, for their prompt aid to the wounded; and it gives a heavy catalogue of cases of labour seriously interfered with by the shock consequent on the explosion, and which came under the care of Mrs. Bailey, the lady visitor, into whose good and kind keeping the poor women came. Mrs. Bailey

refers to the cases of no less than twenty-six women: three of whom were delivered of still-born children, three miscarried, three had living children, one was and is seriously ill and wounded in the breast, and sixteen other cases give cause for much anxiety. Many of these poor women have suffered severely by shock and direct injury; but all have had their wants at once supplied, and been tended by Mrs. Bailey night and day with such unremitting care as to have called forth the warmest thanks of the committee. A knowledge of these facts is sufficient, we should imagine, to loosen the tightest-drawn purse-strings.

THE POISON OF THE COBRA.

OUR readers will recollect that some interesting experiments have lately been made in India relative to the action of the poison of the cobra, by Dr. Shortt. This gentleman, having regard to the numerous lives that were lost annually in India from the bite of this snake, was mainly anxious to discover some antidote for its poison, and set about testing the various remedies *in repute* for that object. After much expense, and no little risk to himself, he has found that all are valueless. Still thinking that some effective agent might be known to the natives, he offered a reward of 500 rupees for its production, stipulating that he (Dr. Shortt) should find the cobras and conduct the experiments, which were to be three in number. The prize still remains unawarded. Recently Dr. Shortt has received a communication from Sir T. Madava Row, the Dewan of Travancore, intimating that his Serene Highness the Maharajah has taken much interest in the question, and begs to offer a reward of 1000 rupees, under such conditions as Dr. Shortt may think desirable, to the person who can produce a remedy, and satisfy him that it is effectual against snake-bite. The prize therefore now amounts to £150. The discoverer, whoever he may be, will serve the cause of humanity greatly; and this announcement, we hope, will awaken an interest in the question that may lead to some satisfactory result. Dr. Shortt has been good enough to say that he will be glad to facilitate the conduction of experiments (or to receive any suggestions thereon), and that he will consign to us, for the use of any gentleman disposed to investigate the question, heads of cobras, uninjured, preserved in spirits or simply dried, or in any other way that may be desirable; and, should we advise it—the idea is exceedingly unpleasant, but if science demand we must obey,—he will send one or more cobras themselves for experiment, on our being satisfied that every precaution will be taken to prevent the likelihood of any accident occurring. Certainly never were conditions more favourable for experiment, ugly though it may be. We therefore hope the result will be the discovery of an antidote to a poison which kills so many human beings every year.

WAR AND ITS INFLUENCES UPON THE POPULATION.

WE are really not surprised that the French Chamber became alarmed at the prospective effect which Marshal Niel's proposals for reorganising the French army might have on the progress of population. The amendment allowing soldiers to marry after the sixth year of service was carried by an enormous majority, spite of the Marshal's strenuous resistance.

Marshal Niel would absorb a very large section of the manhood of France into the army, and compel it to forego all thoughts of marriage for many years. As medical men, we venture to say this would be a very suicidal measure. It may be an amusing piece of banter to urge that the women of France ought to be contented with husbands drawn from the army rejections—the halt, the lame, and the blind; and to add that a squint or a clubfoot is no bar to a man's becoming a husband, but a decided obstacle to his ever making a soldier. But this does not touch the root of the matter, which involves a problem of a physiological character; and it is this: that, had the Marshal's proposal been adopted, a diminished and degenerate population must succeed the present generation. And if France is to maintain her present great military position she cannot afford this. At the close of the great wars under the first Napoleon the strongest and healthiest part of the race of young men in France were well-nigh exhausted, and the rejections from military service formed the staple of her male population. Doctors and physiologists know full well that to possess an enormous standing army, with stringent restrictions as to marriage, is to draw a bill on the future population—to say nothing of the vast increase of disease and immorality directly traceable to the same source.

VENTILATION OF CHURCHES.

Now that we have done so much for improving the health of our soldiers in barracks, and something is being done for our sick poor in workhouses, we think it would be well for churchwardens and others to direct attention to the ventilation of churches. Of course, where so many of those buildings have fallen into comparative disuse, in localities where the population is a migratory one and spends its Sunday away, there is ample cubic space, and the question becomes one of securing warmth during the winter months; but it is far otherwise in some churches. We had our attention forcibly directed to this a few Sundays ago, whilst occupying a seat in the gallery of a church in the neighbourhood of London. The congregation was a very large one, the preacher being a popular and able man; but not a single window was open, even to the extent of an inch. On entering, a faint, disagreeable smell was at once obvious, and before the service was completed this had increased until the church had become quite stuffy from the vitiated air confined within the building. The neighbourhood of the organ was occupied by Sunday-school children, closely packed together. Under the most advantageous circumstances, owing to their position, the very faulty construction of the edifice, and the confined space of the organ-loft, these children would not have reaped the full benefit of an effort at ventilation by open windows; but without this, or any provision by shafts or other expedients for the outlet of foul air, they were simply breathing again and again the same atmosphere. No wonder children go to sleep under the influence of the fatiguing services of the day, sitting in a constrained position, and inhaling a heated atmosphere, unduly charged with the soporific vapours of carbonic acid; and no wonder, moreover, if they become the subjects of bronchitis and colds;—and their frequent attacks of coughing gave some evidence of their liability to pulmonary affections. There is nothing that predisposes to these more than defective aëration, and it only remains for the change of temperature, on going into the foggy atmosphere outside the church, to complete the work. We do not for a moment doubt the kind intentions of the church authorities; but it ought to be remembered that ignorance in such matters is tantamount to inflicting an injury on those classes that compulsorily attend church, such as charity children, which adults may voluntarily endure if they like, but to which they have no right to subject others.

CONTEMPLATED MEDICAL REFORM IN FRANCE.

IT is beginning to be rumoured in the medical circles of Paris that most important measures are about to be adopted by Government in respect to the teaching of medicine in France. M. Duruy, the present Minister of Public Instruction, is said to have drawn up a report, involving an entirely novel plan for the teaching of medicine, and to have presented it for approval to the Council of State. The contemplated reform will be of a most sweeping character, and will completely change the whole order of existing things. According to some, the Faculty of Medicine would be altered in form, and con-

verted into a college of "high teaching," somewhat like the Collége de France. Medical students, after having spent some time in the provincial schools, would come to Paris only to complete their education. The measure would necessarily involve the establishment of a large number of provincial schools of medicine. According to others, the projected reform would be still more radical. The Faculty of Paris would be entirely suppressed, or at least would cease to be an educational institution, and become a mere examining board, with the power of granting a medical degree. From what precedes, it is obvious that reports are conflicting; but they are unanimous with regard to the thorough nature of the projected scheme. One of the results of the system would be to bring together a far smaller number of students in Paris at the same time. It is not known who are the advisers or the promoters of the project, and what members of the profession may have been consulted. But it would seem that the professors of the School of Medicine have not been consulted; a fact which can be easily understood, granted the sweeping nature of the project. It is difficult to foresee how a reform of the kind we have mentioned would be greeted by the medical community of France, though some sort of change seems to be universally desired; and with regard to the peculiar plan which is now being prepared by the Government, there exists no general opinion whatever, since so little of its most important features has transpired.

THE next general meeting of the Medical Teachers' Association will be held on the 20th inst.

REASSURING intelligence of Dr. Livingstone has been received from Zanzibar.

EDWARD STOKES ROBERTS, M.R.C.S., L.S.A., has been appointed Medical Inspector of Seamen for the port of Hull, under the Duke of Richmond's new Act.

THE employment of soldiers on public works in India still continues to show the best results in the way of an improvement in the *morale* and the health of the troops

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A SILVER MEDAL has been awarded by the Royal Humane Society to Dr. Campbell Douglas, who saved part of the crew of the *Arracan*, whose boat was stove in by the surf on the shore of Andaman Island on the 7th of May, 1867.

THE prevalence of tapeworm in the regiments in the Punjab has been recently shown to depend upon the consumption of beef infested with the tænia mediocanellata. Preventive measures have been effectual in diminishing the number of cases of tapeworm.

DR. SYMES THOMPSON will deliver three lectures at the Gresham College, Basinghall-street, on Tuesday, Wednesday, and Thursday, the 14th, 15th, and 16th inst., at one o'clock. The subjects chiefly concern food, the act of digestion and its derangements, and certain diseases specially influenced by diet, such as gout and its allies.

NINE candidates have presented themselves for admission to the Naval Medical Service this month, the majority of whom are from the Irish schools. We are glad to hear that Staff-surgeon George B. Hill, late of H.M.S. *Osborne*, has been appointed to the *Rodney*, Sir H. Keppel's flag-ship; and thus the unfairness of appointing surgeons to staff-surgeons' offices, complained of in naval circles, has been obviated.

THE proposition to found middle-class lunatic asylums in the suburbs of London for the reception of lunatics whose means are scanty, is worthy of every consideration. Several years since the attempt to give effect to such a scheme failed after a good deal of exertion had been made in its favour; but the state of public feeling at the present time promises greater success, and we should be glad to hear that alienist physicians and philanthropists are at work in the matter.

EVERY influence that tends to the better utilisation of the practice of the out-patient department of our hospitals should be promptly encouraged. We are glad to learn that, at the Westminster Hospital, Mr. Francis Mason has made arrangements for holding classes for special clinical instruction in the more common cases that are met with amongst the out-patients of that institution.

IT is seriously proposed that the Medical Society of London shall revert to its former practice of holding a meeting every Monday night, alternate evenings being devoted entirely to clinical discussions and communications. The successful competitor for the Fothergillian Prize is in future to be invited to read his essay before one of the meetings of the Society.

THE in-patient accommodation of the Hospital for Sick Children, Great Ormond-street, is to be extended. At a recent Special Court of Governors, the Committee of Management was authorised to complete the purchase of certain freehold premises for the use of the institution at a cost of £1600. At present the number of beds is seventy-five; but fifty more are to be added. Several members of the Royal family have again recently visited the hospital.

DURING the wars of 1848-49-50, Austria, it is stated, lots no less than 1500 individuals belonging to the medical staff. In 1866, during the so-called seven days' war, Prussia lost 16 military surgeons, whilst 8 others were wounded; of the 16, 14 died of cholera. The Russian armies, during the campaigns from 1853 to 1856, lost through war and disease 382 military surgeons. The ratio of military surgeons killed and wounded in the Crimean war was higher than that of other officers. In the Algerian campaign, the loss of French military surgeons was one in six, while that of the combatant officers was one in thirteen.

THE VACCINATION ACT, 1867.

LAST week we called the attention of our readers to those portions of the new Vaccination Act which have reference more particularly to the members of the medical profession. Since writing that notice we have received a copy of a circular letter which has been issued by the Poor-law Board to the various boards of guardians throughout the country, calling attention to the numerous provisions of the Act, and pointing out particular portions of it.

Doubtless this document, giving as it does a synopsis of the Act, will be of great service to the various boards of guardians, upon whom will devolve, in a great measure, the task of carrying the directions of the Legislature into effect. Still, we are not altogether sure that it will be of the kind of use which it was evidently intended it should be, and we think that its usefulness would have been enhanced if the information given as to some important alterations in the Act were not so meagre as to render it necessary, in our opinion, notwithstanding the issue of the letter, that a careful study be made of the statute in order to become acquainted with its provisions.

We will call attention to two cases of ambiguity, if not error, in the letter. They occur in a paragraph which treats of one of the penal clauses of the Act; they therefore cannot be held to be of but little importance. It is in the paragraph which is supposed to give an exposition of the 31st clause, which empowers justices of the peace to make an order

for the vaccination of children under fourteen years of age, and which imposes a penalty for disobedience of the justice's order, providing, however, for compensation to persons improperly summoned. The Poor-law Board's letter, after stating that a child under fourteen years of age may be summoned before a justice, goes on to state: "And upon the appearance, if the justice finds that the child has not been vaccinated, or had the small-pox, he may make an order," &c. Now, the wording here is so ambiguous that it is quite possible to infer that the justice may make an order *if the child has had the small-pox*, whereas the very reverse is the case, for the Act says that the justice may make an order if he shall find "that the child has not been vaccinated, *nor has already had the small-pox*."

In the next paragraph of the Board's letter the language employed is certainly very strange, considering it is intended to demonstrate that the Act directs "that if the justice shall be of opinion that the person is improperly brought before him, and *shall refuse to make any order* for the vaccination of the child," he may direct the person proceeded against to be compensated for the trouble and annoyance. The Poor-law Board's rendering of this portion of section 31 is as follows: "If the party be improperly brought before the justice, and *an order be made*, the justice may order compensation to the person to be made for expenses and loss of time."

We think it is to be regretted that in the official circular to the boards of guardians the words of the Act were not used, for they are quite intelligible, whereas the Poor-law Board's version, if it does not propound the very opposite to what the Act directs, is certainly so worded as to give every excuse to any person who may take such a view of the Act as would on reference to the statute itself prove to be unquestionably wrong.

The two points above referred to struck us as we took a cursory glance of the paper; but doubtless, with these exceptions, it will prove of service.

To the letter is attached an appendix, which contains extracts from a letter from the Medical Department of the Privy Council, and as the extracts contain views held by that Department (and consequently, we may assume, by the Privy Council) on certain portions of the new Act, we give them in full, and commend them to the serious attention of all who will be called upon to carry out the provisions of the Vaccination Act, 1867. The appendix referred to runs thus:—

Extracts from a Letter from the Medical Department of the Privy Council, addressed to the Poor-law Board, dated December 7th, 1867.

I. It seems in their Lordships' opinion important, first of all, to impress very distinctly on the guardians that now, under section 27 of the Act, they are bound to ascertain at stated intervals whether the Act has or has not been complied with by the parents, &c., of children whose births have been registered within the union, and, in cases of neglect, to take such steps as shall ensure compliance.

For this purpose, as will be seen, lists of persons presumed to be in default are to be delivered half-yearly to the guardians by the registrars of the respective districts in the first week of January and first week of July in each year. The first of these lists will be due in July next, and guardians ought to consider in the meanwhile how the requirements of the Act as to dealing with such lists may be best carried out. It appears to their Lordships that in any district it will be difficult, and in any populous district impossible, for guardians to give full effect to the intention of the Legislature, unless they appoint a paid officer or officers to make the requisite inquiries, and to take such further proceedings as the statute requires. The services of such an officer are desirable, moreover, and in fact almost indispensable for giving proper effect to section 31. For in most districts there will be found, in larger or smaller numbers, unvaccinated children whose births have escaped registration, unvaccinated children who have come in from other districts, and (for some time to come) unvaccinated children born before this Act comes into operation; and the duties of a vaccination officer will apply to all these cases. He ought to find them out, to give notice to the parent, &c., requiring the vaccination to be done within a certain period, and to take such further course as may be required to give effect to the section.

My Lords further think that, if the Act is to succeed fully according to its intention, every officer appointed as above should be instructed to keep himself constantly informed of the progress of vaccination in his district as compared with the local birth registers. If this were systematically done, and if the practice were adopted of sending a notice of default to every parent as soon as the default arose, few cases would remain to be reported half-yearly to the local authority. It is evident that a registrar of births has, from the nature of that appointment, peculiar facilities for acting as vaccination officer to the guardians. But, of course, in certain cases there may be reasons why this appointment should not be made. And for cases where the vaccination officer of the guardians is not the registrar of births, it is to be remembered that under section 24 of the Act the vaccinating officer, as such, has access to the registrar's vaccination book.

The instructions of the vaccination officer should have special reference to any proceedings that may be necessary for carrying into effect clause 17.

II. Next, as regards the local arrangements for vaccination:

(*a*) By sections 2 and 3 the guardians of any union may be required to revise the present divisions of their respective unions, and to consolidate or otherwise alter existing districts. The class of unions that will be chiefly affected by these sections are urban unions, at present so subdivided as injuriously to affect the performance of public vaccination; and my Lords presume that local arrangements will have now to be brought into conformity with the principles laid down in the memorandum issued by the Council Office "on subdivision of vaccination":—

(1) That, except at times when there is immediate danger of small-pox, vaccination be not appointed to be performed at any station oftener than once a week;

(2) That, except at times when there is immediate danger of small-pox, or for special reason in individual cases, vaccination in town districts (unless it be of private patients) be performed only at the public station;

(3) That, as opportunity offers, especially in urban unions and parishes, all unnecessary subdivision of public vaccination among many districts or stations be discontinued; and that in populous towns, unless under special circumstances, subdivision be not made beyond the point where each vaccinating station will have annually at least 500 applicants for vaccination. * * *

(*b*) The intention of the Act (sections 3 and 11) is to have for each vaccinating district one responsible public vaccinator. This arrangement is at present the usual one; and in cases where it does not yet prevail the guardians ought at once to consider the expediency of determining the present contracts, and of making new contracts to the effect intended by the present law. * * *

(*c*) The duties which devolve upon public vaccinators under the contracts will no doubt be defined by the contracts; but here again, with particular reference to the attendances specified in the schedules, my Lords hope that the guardians will not be permitted to overlook the rules essential for the proper performance of vaccination.

(1) Vaccination should not be appointed to be performed at any station oftener than once a week. * * *

(2) Where, as in rural and wide-spread districts, provision has to be made for attendance at more than one station in a district, it is only at the principal station that a weekly attendance should be given, and the attendances at the other or subsidiary stations should be for a certain number of consecutive weeks at two or three stated seasons of the year; and

(3) Where the population of the district is so sparse that there is not a resident public vaccinator, the Poor-law Board will, my Lords presume, sanction an arrangement (under clause 12) for attendances at fixed periods of the year only. An essential condition of success of a vaccination station is that the attendances shall be in fair proportion to the number of children likely to be brought annually to the station of vaccination. * * *

In addition to the reasons advanced there is another why the schedules should be revised. The new law is very stringent in requiring the attendance of parents; and it is of the utmost importance that the attendances of the vaccinators, in conformity with the announcements made to parents, should be punctually given. To effect this my Lords are of opinion that the attendances to be fixed in contracts should be such as vaccinators can reasonably be expected to adhere to.

PREVALENT DISEASES OF EUROPEAN CITIES IN 1866.

DR. VACHER, the well-known French medical statist and journalist, editor of the *Gazette Médicale*, has just published his second annual medico-statistical essay on the mortality of Paris, London, and other cities. This *brochure*, relating to the year 1866, and coming as it does from the hands of an esteemed member of the profession on the continent, who has devoted much attention to a branch of medical science not so widely cultivated as it ought to be—the statistics of disease—demands more than a cursory notice in our pages. The intrinsic interest of the subjects treated can hardly fail of due appreciation by our readers; and, as regards the mode of treatment, we may remark that Dr. Vacher's essay is stamped with the approval of a jury of the Faculty of Medicine in Paris.

The general design of the work may be indicated by the premise, that, for each quarter of the year, the chief meteorological and medical characteristics are given as the key-note to which the matter is harmonised; the author's object being to present a *coup d'œil* of the seasons in their medical aspects.

The dominant fact in the medical history of 1866 is the prevalence of cholera, whose victims in Europe could not have fallen short of 200,000. The epidemic began in Paris in September, 1865, and, continuing to rage during the last months of that year, made its effects severely felt in the opening of 1866. Dr. Vacher states that, when cholera first broke out, typhoid fever and small-pox were the ruling diseases, and these not only continued with unabated force during the reign of cholera, but their intensity was greatly augmented, and they prevailed long after cholera had disappeared.

The beginning of the first quarter of 1866 was marked in Paris by the presence of a declining epidemic of cholera, and by epidemics of small-pox and typhoid fever, then in their full virulence. The deaths from small-pox in the quarter were 291 in Paris, 245 in London, and 107 in Vienna. In the month of January, 131 deaths resulted from typhoid fever in Paris, 44 of these occurring in the hospitals out of 170 cases treated; the high rate of fatality (1 in 4) showing that the disease had taken the ataxo-adynamic form. Some cases of cerebro-spinal typhoid fever were also observed. In February and March the number of *typhoïsants* declined, and the fatality in hospitals fell from 25 to 15 per cent. Puerperal fever carried off, during February, many victims; in the Hospice de la Maternité, out of 74 accouchements, 30 deaths occurred from metro-peritonitis. Dr. Vacher remarks, in reference to this great mortality, that, during all the month of February, the atmospheric conditions were identical with those he had before observed to be coincident with epidemics of puerperal fever; and to those who attribute these epidemics to cold, it is answered that, in dry and cold weather, they never prevail—"la fièvre puerpérale ne revêt la forme épidémique que lorsqu'elle trouve dans l'humidité de l'air une condition favorable à la diffusion du miasme." In London, scarlatina and typhoid fever; in Vienna, small-pox, croup, and puerperal fever, prevailed during the first or winter quarter of 1866.

In the succeeding spring quarter, influenza and measles in Paris; measles in London; scarlatina and typhoid fever in Vienna; respiratory affections in Brussels, were the reigning diseases. Complete saturation being represented by 100, the mean humidity of the atmosphere was 76 in London, 62 in Vienna, 56 in Brussels, and 44 in Paris; taking the mean humidity throughout the entire year, the cities preserve the same order, Paris having the dryest, and London the dampest air. The influenza epidemic, which began in Paris during March, attacked, it is said, more than a fourth part of the inhabitants of the city; and, in corroboration of the surmise that a dominant disease generally impresses somewhat of its character on the secondary diseases prevailing contemporaneously, it is stated that the influence of influenza was evident in the bronchial characteristics of the cases of measles occurring in March and April, as well as in pneumonia amongst old people. To this complication, in fact, is attributed the increased mortality of the last-mentioned disease. In 412 deaths from pneumonia in March, 160 (or 40 per cent.) were of persons over 60 years of age; in April the proportion was 39 per cent.; the mean mortality at this advanced age for the whole year being only 34 per cent. Influenza, itself, although it attacked so large a number of persons, was rarely fatal; differing altogether in this respect from measles, which raged epidemically during March, April, May, and June, destroying a great number of lives of infants and many of adults. A third part of the whole mortality from measles occurred in two contiguous arrondissements (11e and 20e) whose bad hygienic condition renders them always a hot-bed of epidemics; other parts of the capital were almost entirely free from the disease. The mortality from measles was raised to a great extent by the bronchial complications before referred to; and another noteworthy circumstance was the occurrence of several fatal cases of *rougeoles anomales*, in which the eruptions were either tardy or incomplete, or altogether masked by ecchymoses, uncomplicated with any respiratory affection. Dr. Vacher cites the following instance of the communicability of measles in the incubative stage:—He was called one day to visit a boy twelve years old, in a house where there was no epidemic disease; there were no external signs whatever of eruptive fever, but, as there was intense cephalalgia and some languor, the patient was sent to bed and soothing drinks prescribed. The next day the usual symptoms of measles were manifest; on the fourth day the eruption appeared, and the disease followed its own course. In the same house, but on another *étage*, lived a little girl four years old, who had played with the boy on the eve of the day before he was first seen by Dr. Vacher; but there had been no subsequent communication between the children. On the tenth day of the malady in the boy, the girl was attacked with measles, which developed itself without accident. Measles was not less fatal in London than in Paris, causing 1383 deaths in the winter and spring quarters; and it is remarked that if Paris has its unhealthy Faubourg St. Antoine, we have also our foci of epidemic disease—"les quartiers populeux et mal aérés d'East London." At Brussels and Vienna only a few sporadic cases of measles occurred. The effects of the sudden transitions of temperature in March and April are seen in the great mortality from acute diseases of the lungs, and also from phthisis, equally in Vienna, London, and Paris. Hence Dr. Vacher shows that, in the choice of winter stations for patients, those should be selected where the temperature is least subject to variation, and, therefore, the once fashionable practice of sending phthisical patients to Egypt is to be condemned, as a diurnal range of as much as 42 degrees (centigrade), has been observed in that country.

In the summer months of 1866, the reigning disease in Paris, London, Vienna, and Brussels, was cholera; there was considerably more moisture in the air than in the previous quarter, the temperature, of course, being higher.

Dr. Vacher enters at some length into the etiology and treatment of cholera, but the only point to which we shall now refer is the effect ascribed to the epidemic in modifying or impressing its characteristics on other prevalent forms of disease. This modification was especially observable in typhoid fever, small-pox, phthisis, articular rheumatism, and in puerperal states. A young girl suffering from typhoid fever, had, on the third or fourth day of the malady (without having been purged) about thirty spontaneous alvine serous evacuations, without abdominal tension or pain, her face being drawn and the pulse feeble. M. Chauffard, who had charge of this case, saw in it an undoubted choleraic influence, and at once checked the diarrhœa, which would speedily have been fatal. As an illus-

tration of the pernicious influence of these secondary attacks of cholera, it is stated, that of 19 phthisical patients attacked with cholera secondarily, 15 died; out of 20 cases of typhoid fever so complicated, 18 were fatal; and of 17 cases of cholera supervening on small-pox, 12 were fatal. The influence of cholera on pregnant or puerperal women is an interesting subject. Of 23 pregnant women attacked with cholera (11 of whom miscarried), 19 died; the mortality being almost equally heavy amongst those who miscarried as amongst those who did not miscarry. Of 25 women who were attacked with cholera after childbirth, 15 died. So far as these results (taken from hospital practice) go, they show that cholera is not more fatal to puerperics than to persons in ordinary health (about 60 per cent.), while in pregnant women attacked, the mortality is much greater (82 per cent.)

In the autumn of 1865, cholera, measles, small-pox, and typhoid fever were all declining in Paris; scarlatina prevailed in London; cholera in Vienna and Brussels. The cholera epidemic disappeared from Paris about the end of October, but there were sporadic cases in November and December. Dr. Vacher combats the notion that the last cases of the epidemic were less grave than at its first outbreak; he maintains, in fact, that the lethality of the disease does not diminish because the frequency of its attacks diminishes; and, as reliable statistics on this head are wanting both in Paris and London, he considers that the observations which have been made in Stockholm, Naples, Holland, and Belgium, supply the only evidence either way, and that goes to prove that the last cases are the most virulent.

In the absence of any diseases calling for special remark in the last quarter of 1866, Dr. Vacher records the following singular and interesting case:—A woman aged thirty-two years, the mother of several children, and who had been for many years subject to epileptic fits, fell into the fire during a fit, in December 1866, and severely burnt herself on the back and left arm. The burns remained unhealed for about eight months, during which time the woman was perfectly free from fits; but as soon as the wounds cicatrised the fits returned.

Taking a general survey of the mortality of 1866, it is found that the death-ratio in Paris was 1 in 38·2 inhabitants; in London, 1 in 37·9; in Vienna, 1 in 28; in Brussels, 1 in 25·5; in Berlin, 1 in 24·3. A fact worth noting has reference to the distribution of phthisis, which in Vienna caused 1 out of every 4 deaths, 1 in 6 in Paris, 1 out of 8 in London, 1 in 9 at Berlin, 1 in 10 at Brussels, and 1 in 17 at Stockholm. A fourth part of the aggregate mortality in all these cities is caused by diseases of the respiratory organs.

THE PRESERVATION OF EUROPE FROM CHOLERA.

THE recommendations of the International Sanitary Conference for the Preservation of Europe from Cholera will not altogether fall to the ground. So far as the Continent is threatened by way of the Red Sea, it must be confessed that the Ottoman Government has not spared efforts to carry the advice of the Conference into practice. The last two pilgrimages to Mecca were placed under an enforced and not ineffective sanitary control; and the return of the Egyptian pilgrims from the sacred city, and of those who traversed that country, was governed by stringent regulations, calculated to intercept migratory cases of cholera. During the year which has just transpired, the Ottoman Government took a further step to strengthen the defences of its territories against the dreaded pestilence. It sent a Commission to the Red Sea to discover a fitting locality for the establishment of a station for the health-observation of all ships passing the Straits of Bab-el-Mandib, and of a lazaret for the reception of suspected pilgrims coming from India and the East. No single locality was found which would serve for both purposes, and the Commission concludes that the Isle of Perim is the only place where a proper surveillance of ships entering the Red Sea can be effected, and that Cheyk-Sayd, or the Isle of Camaran, is the most fitting locality for a lazaret. The Isle of Perim effectually commands the entrance of the Red Sea, but it does not present any area adapted for the encampment and observation of from 2000 to 3000 persons. Cheyk-Sayd is within eye-shot of the Isle of Perim, and it is situated on the Arabian coast, to the north-west of Cape Bab-el-Mandib. It possesses a capacious roadstead, with good anchorage, and is well sheltered from the south-east wind, but not tenable during the prevalence of the opposite monsoon. On shore there is a valley, narrowest towards the sea, which extends about three miles inland, to the foot of the Djebel-Bara mountains. The surface is sandy, and, with the exception of some stunted palms, utterly devoid of vegetation. The heat of the valley is excessive, and its water-supply most defective. To the south of it are several wells of brackish water, but it is reported that at an hour's distance to the north there are wells of sweet water. The latter, however, are in a district inhabited by savage tribes, and are not accessible except by a strong armed force. When the apparatus for distilling water, used by the English garrison in the Isle of Perim, was out of order, a little while ago, the troops obtained water from Moka, in preference to courting the dangers which surrounded the wells to the north of Cheyk-Sayd. The Isle of Camaran is situated 160 miles to the north-east of the Straits of Bab-el-Mandib, and south-west of Loheia. Its greatest length is eleven miles, and its greatest breadth five miles and a half. There is an excellent and completely sheltered port, and a good roadstead. The population number about 1200, chiefly fishermen, and an ancient fort is garrisoned by a few Turkish troops. The surface consists mainly of extensive uncultivated plains, the inhabitants obtaining their provisions from Yemen. Towards the centre are some clumps of palms, and some twenty wells of fresh and sweet water. Other wells, now choked, may be made available for use. The climate of Camaran has the repute of being the most salubrious in the Red Sea. The south-east part of the island is separated by a strait of only a mile and a half in breadth. Camaran presents very favourable conditions for the encampment, surveillance, and provisioning of a large body of men, but the distance from the Isle of Perim is a grave drawback. It is obvious, from the report of the Commission, that the difficulties in the way of carrying out the recommendation of the Conference for the surveillance of ships and detention of suspected vessels at the mouth of the Red Sea, are even greater than was at first supposed, and that the probable inefficacy of any such measure increases with the difficulties. It is certain that not a chance of success will be afforded to any efforts of the Turkish Government in protecting the Hedjaz and Egypt from India, unless they receive the cordial support of the English Government. Our Government, however, not much to its credit, would appear to have shelved the whole matter.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JAN. 7TH, 1868.

MR. SIMON, F.R.S., PRESIDENT, IN THE CHAIR.

ANNUAL REPORT.

THE annual meeting of this Society was held on Tuesday evening last. The first business was the reading of the Report by Mr. Holmes. It ran as follows:—

The Council of the Pathological Society are able again to congratulate the members upon the continuous progress of the Society in numbers and in popularity, as evinced by the attendance upon their meetings. The total number of members is now 436, which shows an increase of 65 during the last three years. The number of elections during the year has been 32, against 14 deaths and resignations. The number of annual subscriptions received has been 325. This is believed to be the highest total number of members which the Society has yet attained.

The proposal mentioned in the last Report of the Council to appoint a committee to report on all specimens submitted to the Society as being instances of cancer, has been expanded and developed into a permanent committee of reference on all morbid growths. This committee has now actually commenced work. It is constituted of the following members—viz., Dr. Andrew, Dr. Bristowe, Mr. Bruce, Dr. Dickinson, Mr. Hulke, Dr. Moxon, Mr. Sibley, Dr. B. Sanderson. The Council feel confident that the Society will require no further guarantee of the efficiency of the committee than is furnished by the names

of its members. Its function is to examine and report upon such specimens of morbid growths as are submitted to it by the President, and the report will form a distinct chapter in the yearly volume of the Transactions.

This chapter will furnish, as the Council confidently anticipates, a valuable mine of pathological material, the worth of which will be made fully apparent by the labours of future generations of writers on the great subject to which the work of the committee applies.

The application for rooms at Burlington House, which was referred to in last year's Report, has been unsuccessful, as the Government is not in possession of any unoccupied space in that building; and the Council is therefore unable to hold out to the Society any prospect of relief from the heavy burthen which the rent of the present rooms imposes upon its funds.

It only remains for the Council to indicate the chief heads of the Society's accounts. The collector's receipts have been £385 7*s.*—viz., 325 annual subscriptions, £341 5*s.*; 32 entrance fees, £33 12*s.*; 2 composition fees, £10 10*s.*;—total, £385 7*s.* The proceeds of the sale of the Transactions have exceeded all previous experience. The sum received this year has been £44 16*s.* 9*d.* This fact shows the wisdom of the large expenditure which was sanctioned by the Council on the 17th volume. Seeing the large demand which now exists for the Transactions, the Council have authorised the increase of the number of copies to 600.

The total receipts are in excess of the year's expenditure by the sum of £65 1*s.* 1*d.*, which will clear off the debt left due last year to the treasurer, and leave a balance of £33 7*s.* 10½*d.*

Mr. MOORE moved the adoption of the Report, and remarked on the great good the Committee on Morbid Growths was likely to effect, the more especially as they insisted that a clinical history should be handed in along with the specimens. The motion was unanimously carried.

Dr. WILKS then moved a vote of thanks to the officers of the Society, and eulogised the manner in which they had done their duty.

Dr. C. J. B. WILLIAMS seconded the motion.

The PRESIDENT added his congratulations on the success of the Society. Its popularity spoke well for itself and for the profession. Pathology was the essence of practical medicine, and the foundation of all ulterior development.

Reports were then read on Mr. Moore's Case of Cancer, from the Committee of Morbid Growths, and on Dr. Fuller's specimen of Degenerated Heart (it proved to be syphilitic), by Drs. Wilks and Bastian.

Dr. DICKINSON showed some drawings of the Changes induced in the Kidneys by Depurative Action (Amyloid Degeneration), shewing how different the appearances were in different instances, although always giving the same reactions. Probably there was first intertubular effusion, with enlargement, subsequently contraction, with, it might be, a granular appearance.

Mr. J. CROFT showed a Specimen of Malformed Uterus and Rectum, removed from a child who lived four days. There was complete atresia, and an exploratory incision about two inches deep was made, but no rectum was discovered. After death, the uterus was found greatly enlarged, divided into two incomplete chambers by a partition, and communicating by narrow orifices with the bladder and rectum, so that it was filled with fæces and urine. The cornua were dilated and separated from the body of the uterus.

Mr. CURLING remarked that, although he had made the subject of malformations of the rectum a special study, he had not seen such a specimen.

Mr. CROFT then produced a specimen of Cancer of the Prostate, projecting into the rectum, although situated on the front of the gland. A catheter had been passed for retention of urine, and the man died eighteen days after the operation, with multiple abscesses in every part of the body; yet he had no rigors. Specimen referred to committee.

A third specimen of Deformity of the Finger was exhibited by Mr. Croft. A portion of the bone of the metacarpal phalanx had died, whilst the other side continued to grow, so that the bone became twisted round, and had to be removed.

Mr. DE MORGAN exhibited some extraordinary specimens of bone from a patient who had suffered from rheumatoid arthritis. The man, aged forty-four at the time of his death, had come under Mr. De Morgan's notice fifteen years ago. He then had a swollen knee, and had suffered little pain. He fell some time after going out, and was taken to University College Hospital. His thigh was broken, and the fracture never united, although the great trochanter became enormously enlarged, and, in fact, supported the body with the pelvis resting on it. About four years ago his elbow began to swell, and its bones became loose, so that they could be twisted in any direction; yet there was no tenderness, and scarcely any pain. He suffered slightly from rheumatism, and his digestion was very bad. Otherwise, there seemed to be but little the matter with him except in these joints. He died from exhaustion, when cancer of the pylorus was discovered, and his kidneys were found to be disorganised. His urine was never albuminous, but it contained only one-third the normal quantity of urea, along with much phosphates.

Mr. CURLING suggested that a few casts should be made of these unique specimens.

Mr. W. ADAMS remarked that they appeared to confirm his views as to such formations being exogenous rather than endogenous.

Dr. C. BASTIAN exhibited some specimens of Lung affected with Tubercular Pneumonia. There was no tubercle to be seen in the body, yet the habit and appearance of the patient were tubercular rather than strumous. Both lungs were affected, the upper lobes being consolidated and broken into cavities; but the right lung in its lower portions only exhibited some specks like miliary tubercle, possessed, however, of a different structure. The intestines were also ulcerated, yet there was no tubercle in them.

Mr. DE MORGAN told how a lad sprained his elbow so that the olecranon died, and was removed; but all other parts, being healthy, were left untouched. A strong solution of chloride of zinc was applied to the cartilage. The wound healed well, and the elbow has now almost recovered its normal figure.

The list of officers for the ensuing session, as announced in THE LANCET last week, was adopted by the Society.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JAN. 1ST, 1868.

DR. HALL DAVIS, PRESIDENT.

ANNUAL MEETING.

The following gentlemen were elected Fellows:—Dr. Andrew Brown, London; Dr. Butler, Woolwich; Dr. James, Forest-hill; Dr. March, Rochdale; Mr. Marriott, Leamington; and Dr. Wilton, Sutton.

Dr. TREND read a paper on "Funis Presentations." The details of twelve cases were fully given, and the treatment adopted in each case was specified.

Mr. BAILEY, of Thetford, read a paper on "A Case of Transposition of the greater part of the Abdominal Viscera into the left cavity of the Thorax."

Dr. THOMPSON, of Nottingham, read a paper on "A Case of Congenital Umbilical Hernia."

The business of the annual meeting then commenced.

The report of the auditors for the year ending Dec. 31st, 1867, was read, from which it appeared that the balance in the hands of the treasurer was £180 11*s.* 10*d.*, and that during the year a sum of £100 had been invested in the funds in the names of the trustees of the Society. The balance sheet, read by the Secretary, showed that the Society had received during the year £553 7*s.* by subscriptions from the Fellows, and £81 14*s.* 6*d.* by the sale of the volume of "Transactions."

Dr. WESTMACOTT, after congratulating the Society on the highly satisfactory condition of its funds, moved the adoption of the auditors' report.

Dr. ROUTH seconded the resolution, and it was carried unanimously.

The report of the Hon. Librarian for the year 1867 was read. It contained a statement of the number of volumes possessed by the Society, of the additions received by presentation during the past year, and described the arrangements made for the comfort and convenience of the Fellows at the rooms recently taken for the library at 291, Regent-street.

Dr. EDIS then moved the adoption of the alterations in the Bye-laws suggested by the Council.

Dr. RAYNER BATTEN, of Gloucester, seconded the proposition; and, after some discussion, it was carried by a large majority.

A vote of thanks—proposed by Dr. EDIS, and seconded by Dr. TAYLOR—was then given to the President and honorary officers of the Society for their services during the past year, and was acknowledged by the President.

The following gentlemen were elected officers for the year

1868:—Hon. President: Sir Charles Locock, Bart., M.D. President: Dr. J. Hall Davis. Vice-Presidents: Dr. A. Hall (Brighton), Dr. Graily Hewitt, Dr. Braxton Hicks, Dr. Priestley, Mr. Spencer Wells, and Dr. Whitehead (Manchester). Treasurer: Dr. Meadows. Honorary Secretaries: Dr. G. C. P. Murray and Dr. Gervis. Honorary Librarian: Dr. Playfair. Honorary Members of Council: Dr. Tyler Smith, Dr. Oldham, and Dr. Barnes. Other Members of Council: Mr. J. M. Barton, Mr. John Clay (Birmingham), Dr. Cory, Dr. Cumberbatch, Dr. Eastlake, Mr. Robert Ellis, Dr. Greenhalgh, Mr. Seymour Haden, Mr. Holman (Reigate), Dr. Leishman (Glasgow), Mr. Napper (Cranley), Mr. Nunn, Mr. Oldham (Brighton), Dr. Pollock, Dr. Roberts (Manchester), Mr. Scott, Mr. Squire, and Dr. Tilt.

The PRESIDENT then delivered the

ANNUAL ADDRESS.

He commenced by congratulating the Fellows upon the continued and still increasing prosperity of the Society, upon the great interest felt in its meetings, and upon the high esteem in which its published "Transactions" were held. He then referred to the objects contemplated in the establishment of an Obstetrical Society. One should be, to employ its best efforts to enlarge the opportunities for education in that department, for the benefit of those who are training in our medical schools for the practice of their profession. Much had been done of late years by our hospital schools, and by the examining boards, to improve medical education in its relation to obstetrics; but still too small a proportion of time was given to the clinical study of obstetric practice. It was true that for some few years the College of Surgeons had instituted a diploma in midwifery and its allied subjects for voluntary candidates; but since only comparatively few volunteers for that distinction offered themselves, the desired object of encouraging a diligent study of obstetric science and practice was very inadequately fulfilled. The required remedy was to arrange the student's time, uninterfered with by other clinical work, so as to enable him duly to qualify himself by such clinical opportunities as hospitals should afford for those responsible duties which he would have to undertake when he entered upon the practice of his profession. It would be desirable, further, that all candidates for the diploma of the College of Surgeons should be examined as to their practical knowledge of obstetrics in the same way as were candidates for the medical degrees of the University of London, and for the licence of the College of Physicians. It might, moreover, be permitted to any candidates wishing for special distinction in the department of obstetrics, to submit themselves to a higher examination for honours. There were also other objects in which the Society might very usefully be engaged—namely, through the action of committees, to collect information from the profession on certain important questions of obstetric interest requiring a fuller experience and elucidation. Such an one was the question of the causes of the great mortality among young infants, which had been suggested to the Society by Dr. Farr, of the Registrar-General's Department. The President then referred with gratification to certain facts as proofs of the continued prosperity of the Society. The number of Fellows at the present date, the commencement of the tenth session, amounted to 588,—viz., 27 in excess of those of the year 1866, and that notwithstanding losses by death and otherwise. Of this number, 61 were elected during the past year. With respect to the funds, after paying all expenses, there was a balance in hand of £180, as against £90, the balance in 1866; while the Society possessed property invested in consols representing £1113, of which £100 was invested during the past year, as against £50 during 1866. Another gratifying circumstance was that £81 had been obtained from the sale of the "Transactions" to members of the profession not connected with the Society, as against £51 from the same source in 1866, being, moreover, £50 in excess of the average receipts from the same source during the preceding eight years. The President then referred to the removal of the library to 291, Regent-street, and paid a tribute to the active interest displayed in the transfer, and necessary arrangements, by the Honorary Librarian, Dr. Playfair. It was intended that the weekly, monthly, and quarterly medical periodicals, both British and foreign, should be placed on the tables, and that in every possible way the comfort and convenience of the Fellows should be consulted. Ample accommodation was preparing in the same rooms for the display of the collection of obstetric instruments belonging to the Society, and for the exhibition of pathological specimens of obstetric interest. The President next adverted to the quality of the papers and other contributions from Fellows, which would appear in the annual volume, and which would bear comparison with those of any former year. Some particulars were then given with respect to the losses the Society had sustained by death. Six Fellows had died during the past year. Mr. James Reeves Traer died in Paris in April last. He was superintendent of Class 17, and obtained honourable mention for the excellence of his photographs of microscopic objects at the International Exhibition of 1862. He wrote a paper, "Sur l'Arrangement des Veines de l'Ovaire," published in the "Bulletins de la Société Anatomique." At the time of his death he had held for a short period the office of Honorary Librarian to the Society. Dr. Howell Phillips, Mr. George Robins, Mr. Joseph Ward, Mr. John Loane, and Mr. Samuel Smith, of Leeds, were the other Fellows who had died during the year. Mr. Samuel Smith died in November last at the age of 77. Besides holding other appointments, he was surgeon to the Hospital for Women and Children at Leeds, and Lecturer on Surgery and Midwifery at the Leeds School of Medicine. He was formerly on the Council of the Society, and at the time of his death was Honorary Local Secretary for Leeds. In conclusion, the President cordially thanked the Fellows for their earnest and well-directed endeavours to promote the usefulness of the Society, and the secretaries for their indefatigable and valuable services during the year.

Mr. JOHN SCOTT proposed a vote of thanks to the President for his valuable address, which was seconded by Mr. MITCHELL, and carried by acclamation.

HARVEIAN SOCIETY.

THE annual meeting of this Society was held on Thursday week at the Stafford Rooms, when a fair sprinkling of members and their friends were present at the *soirée* held on that occasion. The official reports were of the most satisfactory character, especially that of the treasurer, who stated that at no time has the Society stood so well financially, a considerable balance remaining at the banker's, although the expenses—in consequence of the work of the Committee for investigating the question of infanticide and the prevalence of venereal diseases amongst the civil population—have been unusually heavy.

Votes of thanks were accorded by acclamation to the retiring President, the Council, Treasurer, and the Hon. Secretaries.

Dr. J. S. POLLOCK delivered an interesting address. He passed in review the origin of the Society, the subjects brought before the members in the various papers read during the session, and noticed at length the objects of the investigation proposed and carried out in reference to the extension of the Contagious Diseases Act of 1866 to the population at large. Dr. Pollock answered the various objections urged against the recommendations of the Committee of the Society that has lately terminated its labours, which aimed only at the prevention of disease.

The ballot showed that the following gentlemen had been elected officers for the new session:—President: Mr. Ernest Hart. Vice-Presidents: Dr. Fred. Cock, Dr. W. F. Cleveland, Dr. E. S. Haviland, Mr. H. G. Times. Treasurer: Dr. Fuller. Hon. Secretaries: Mr. J. Brendon Curgenven, Dr. W. Hickman. Council: Dr. H. F. Bate, Mr. Gayleard, Dr. Greenhalgh, Dr. J. Holmes Jephson, Mr. R. S. Jeffs, Dr. J. Stewart Lamb, Mr. James R. Lane, Mr. J. Z. Laurence, Mr. Newton B. Lee, Dr. Duncan Menzies, Dr. Gueneau de Mussy, and Mr. J. Rushforth.

At the Soirée, a great variety of interesting objects were shown by Messrs. Krohne and Sesemann, Van Abbott, Spencer, Field, Heather Bigg, O'Neill, Whicker and Blaise, &c.

ECONOMICAL COOKERY FOR PUBLIC SERVICES.

A MEETING of the members of the Society of Arts and their friends was recently held, to see Captain Warren's system, and the Norwegian cooking apparatus, practically demonstrated. A large number of ladies and gentlemen tasted for themselves, with evident approval, the meats and vegetables cooked before their own eyes. Captain Warren cooks his meat in its own ju ces in an inner cylinder, an outer one containing

water, which is kept at the boiling point. In this way a great saving is said to be effected, the meat, or other food cooked, being found not to have lost anything like so much weight as under ordinary circumstances. Moreover, Captain Warren effects an immense saving in fuel. It seems that it has been in many instances quite one half; and results are similar in the navy, the army, and public institutions. If this be so, it deserves much greater attention than has been as yet bestowed upon it. The Abyssinian apparatus of Captain Warren weighs just 146 pounds, and can cook for 100 men, with 30 pounds of wood and camel's dung combined, the same rations as those used in barracks. The ordinary apparatus could be very easily fitted to existing ranges. General results of army cooking show a return of 25 pounds of ordinary fuel for 120 men. A tabulated form kept at the Paris Exhibition during a trial of the apparatus shows even a less consumption than this. We should be glad to see a competent committee appointed to report upon the question. In the feeding of our army and navy it seems that a vast outlay might be prevented, and it is the height of folly not to determine at once whether Captain Warren's system cannot by its general use be made to pull down the present heavy estimates. It is calculated that its general employment in the army might effect a saving of £15,000 per annum for fuel. We commend the subject to the notice of hospitals, prisons, workhouses, and public institutions generally. At the same meeting, a plan of automatic cookery, patented by Mr. Sörensen, was exhibited. This may be seen in operation daily at 13, Duke-street, W.

THE SANITARY CONDITION OF THE CITY OF LONDON.

THE Commissioners of Sewers of the City of London are informed by Dr. Letheby, in his annual report, now ready, that the number of births in 1866-7 was 2390, the deaths 2137, in the City of London, and that there has been a decrease of 19 per cent. in marriages, 29 per cent. in the births, and 24 per cent. in the deaths. The mortality for the past year is remarkably small, 18·6 per 1000; less, therefore, than that of any of the large towns of England. The infant mortality was excessive, though not so large as in former years. The deaths from tubercular diseases fell from the average of 593, to 469 in the year, zymotic disease from 586 to 329, and inflammatory diseases of the lungs from 473 to 341. A diminution has also been recorded in regard to measles and scarlet fever; indeed, a great improvement in the sanitary state of the people is observable.

Dr. Letheby gives a full account of the cholera outbreak of 1866, and states, as the result of his inquiries, that "there is no proof, whatever, of choleraic pollution of the water" of infected districts, as explaining the occurrence of the disease; that there was no coincidence of time in the appearance of cholera in the districts supplied with the suspected water; that numerous districts receiving the same water, but situated at high level, or placed beyond the cholera field, were entirely exempt from the disease; that even in the very heart of the cholera field there were places receiving and using the suspected water with impunity; and that other places, not supplied with the water, but situated within the infected area, suffered equally with the neighbourhood around. Dr. Letheby does not deny that choleraic matter may be diffused through water, and produce the disease. He takes exception to this mode of causation as applied to the epidemic of 1866. These views, however, are entirely opposed to the careful and trustworthy inquiries of Mr. Radcliffe. Dr. Letheby gives due prominence and value to the views of Pettenkofer.

Houses to the number of 22,447 have been inspected during the year, and defects in 4113 remedied. Sanitary improvements were caused to be made in 156 ships. The inspectors of slaughter-houses condemned nearly 129 tons of meat as unfit for human consumption; and at Billingsgate Market a very large amount of stale and putrid fish was destroyed.

THE CORONERSHIP FOR WEST MIDDLESEX.—Up to the present time the following is the list of medical candidates for the vacant office:—Dr. Whitmore, Medical Officer of Health for Marylebone; Dr. Hardwicke, Deputy Coroner to Dr. Lankester; Dr. Holt Dunn. We understand that Dr. B. W. Richardson has been solicited to stand.

Correspondence.

"Audi alteram partem."

THE HEALTH OFFICERS AND THE SEWAGE QUESTION.

To the Editor of THE LANCET.

SIR,—Will you allow me to make a few observations upon the matter contained in your report of the meeting of the Health Officers' Association of the 21st ult.? I am not about to contrast the merits of irrigation as against the earth-closet system, but having some practical acquaintance with the subject, I wish to make a few corrections of errors advanced at that meeting. It was fully proved, at the Leamington Sewage Congress, that neither method was fitted for every case, and it will be by experience alone, not by theory, that we shall eventually be able to weigh the merits of one against those of the other. If Dr. Hawksley had had any practical acquaintance with the working of parish matters, he would have known that his theory is impracticable, and his calculations erroneous. I have had some experience in forcing upon the attention of the local authority the necessity of a perfect and regular cleansing of dust-bins. The local authority is anxious to do its duty, but the public will not, penalties notwithstanding. The work is always more or less imperfectly performed. If this be the case with dust-bins outside the house, how much more dangerous would it be with closets inside! Every health officer must know, from personal observation, that amongst the poor it is no uncommon thing to find them neglect to raise the handle of the water-closet after use, a neglect that would soon render the earth-closet useless. I feel certain that, until the poor of large towns become much more cleanly than they are at present, it is wiser economy to take the sewage to the farm by a carrier, that costs nothing, than to bring the farm to the sewage, and then cart it back again.

I am not prepared to agree with Dr. Letheby that the excessive dilution of sewage is both wasteful and mischievous. The true key to the safe and profitable disposal of sewage is its immediate removal and rapid application to the land in a fresh state. This can only be done by much dilution, or by the general adoption of the earth-closet system. Excessive dilution conveys it rapidly to the farm, and prevents evil arising in the neighbourhood of the meadows, the excreta being at once deodorized before putrefactive fermentation takes place. It is the use of putrefying sewage in one case, and of fresh excreta in another, which leads to such various results. I take it as a *sine qua non* of sanitary science that sewage must be rapidly conveyed away, and applied fresh to vegetation, to render it profitable for irrigation, or safe for the inhabitants of the neigbourhood.

I now come to Dr. Tripe's idea, that it is questionable whether sewage grass is perfectly wholesome. We have had extensive experience in this neighbourhood for some years, and I can safely say that there is not a particle of evidence in support of Dr. Tripe's view. The consumption of the grass is so general that if it were unsafe we must have discovered it long since.

Dr. Thudichum is in error when he states that fæces are of no value whatever, except on sandy soil. We have most pointed evidence to the contrary. Our farm at South Norwood is a clay soil, and is even more successful than the gravel soil at Beddington; the length of the grass grown is greater, and the water passes off as perfectly freed from sewage ingredients.

Mr. Girdlestone is also in error in stating that rye grass cannot be made into hay; it is so made, and there is a plan of making it by artificial means which, even in wet seasons, may render the farmer independent of sunshine; and where the supply is so abundant and constant the drying process may be constantly at work.

The President's observations also require a correction. If he will visit the meadows during the prevalence of frost and snow he will see that there is no check to the action of irrigation. It is a curious and instructive fact that the meadows do not freeze; the sewage is delivered upon them comparatively warm, and a moderate amount of vegetation is always found. Hence frost and snow, unless excessive and long continued, do not interfere with the principle of irrigation. Dr. Druitt also states, that the sewer gases may under the same

circumstances be driven back into the houses. We have adopted a system of ventilation which renders this impossible—a system applicable to every house, by means of which the gases are so diluted as to be innocuous. Every soil pipe is continued upwards, and made to open on the outside of the house, starting from above the level of the trap in the water-closet. Thus all chance of gas pressure on the trap is removed, and every other connexion with the sewer is indirect only, such as the overflow and waste pipes of baths and cisterns, and, when possible, sinks also. The main sewers are ventilated every 100 yards by means of a shaft opening on the surface of the road. The shaft contains a basket of charcoal on the principle recommended by Dr. Letheby. The people are beginning to learn that private works, when cheaply and badly done, are fruitful causes of disease, and that sewer ventilation is as much a private as a public question; and, as bearing upon the President's opinion, I can most confidently assert that every true case of typhoid fever, occurring within my knowledge in this district, has been distinctly traced to a want of proper ventilation in the private works of the house, or some direct impediment with the sewer itself.

I have to apologise for presuming to offer opinions to medical officers of health; but as we are all anxious for truth, I hope you will allow me, as a member of the Croydon Local Board of Health, to say what our experience has been.

I am, Sir, yours &c.,

Croydon, Jan. 4th, 1868. ALFRED CARPENTER, M.D.

DUBLIN.

(FROM OUR OWN CORRESPONDENT.)

ON Thursday last a most influential deputation, comprising the names of most of our leading physicians and surgeons practising in this city, waited upon the Chief Secretary for Ireland with the view of bringing under his notice the claims of the medical men employed under the Poor Law and Medical Charities Act, for superannuation when rendered physically incompetent longer to discharge their duties. If I am correctly informed, this is a question which will hereafter prove of importance to my medical brethren on your side of the channel, as I understand it is proposed to introduce, at all events into London, a system of dispensary relief modeled on our existing Irish system, in which no such provision is contained. The views of the deputation were ably stated by Dr. McClintock, ex-master of the Rotunda Lying-in Hospital, who was supported by Dr. Churchill, President of the College of Physicians, Dr. Jacob, Mr. Macnamara, and Dr. Quinan. Of course, his Lordship met the deputation with the usual stereotyped objection that all the medical man's time is not occupied in the discharge of his duties—an error which, though it has been explained and refuted, still crops up on every occasion. The fact is that no civil servant has his time so completely at the disposal of his employer as the Poor-law medical officer, he being liable at any hour either of the day or night to be put in motion by the presentation of a visiting ticket, a contingency by no means of unusual occurrence, and for which he must always hold himself prepared, so much so that he can never absent himself from his district without providing at his own expense a substitute; unless, indeed, in the case of sick leave, when generally, but by no means invariably, his *locum tenens* is paid for by the guardians. Another strange objection brought against the granting of this act of justice by his Lordship was, that were it granted to the medical officers, it should also on similar grounds be granted the chaplains employed under the Poor-law system, as of course it should; but to make that a valid reason for refusing the present application is only to try to prove that two wrongs make one right. The principle is a most important one, equally, if not more so, important to the public as to the profession, as no man should be allowed to hold a post for the discharge of the duties of which he is physically incompetent; and abuse of the concession can be guarded against by rendering the Bill simply permissive to boards of guardians, who would not put it in force unless urgent need existed for it; besides which, no medical man would willingly, so long as he is able to do his work, introduce into the centre of his practice an opponent who might eventually oust him out of it. All, however, that the deputation gained from his Lordship for their pains was, a promise to reconsider the matter if they could succeed in procuring unanimity upon the point amongst our Irish members of Parliament.

Jan. 7th, 1868.

ABERDEEN.

(FROM OUR OWN CORRESPONDENT.)

SINCE the beginning of 1864 I had to report from time to time in your columns the state of fever in the Aberdeen Infirmary. More than once I gave a retrospective summary of the disease, as if we had done with the subject, but had to recur to it again and again. Although the epidemic in a great measure disappeared in the autumn of 1866, yet the town has never been entirely free from the disease. Even at present, in the absence of any marked epidemic, the fever-house attached to the hospital, with forty beds, is nearly full, but with this drawback: that enteric and typhus cases are indiscriminately associated together; and when small-pox cases are admitted they are necessarily thrust into the same wards. The prolonged continuance of typhus has been so marked as to draw the attention of the Registrar-General, who, in one of his reports of last year, referring to the number of deaths from typhus returned from Aberdeen, states that this circumstance would almost lead to the belief that typhus is endemic there.

Perhaps this may be in part referable to the great deficiency of hospital accommodation for contagious diseases—a deficiency so great as not to admit the separation of the diseases from each other even under ordinary circumstances. The accommodation for ordinary medical and surgical cases, amounting to 260 beds, is not more than sufficient for the ordinary requirements of such a town as Aberdeen; but when an epidemic occurs, the number of cases brought to the hospital is far more than can be adequately provided for even by appropriating a number of the ordinary medical wards. Overcrowding and its disastrous consequences are the necessary results. Such a state of matters tends rather to spread than check the disease; and, as I have formerly reported in your columns, it has repeatedly happened that fever and small-pox have spread in the surgical wards, and that patients, after undergoing operations, have caught infection, been transferred to the fever wards, and died there.

The medical officers could not allow this to continue longer without some effort being made towards improvement. On December, 1866, a report on the subject was submitted to the parochial board of St. Nicholas parish, in the hope of getting that board to expend on a fever hospital a portion of a large sum of money which had then come into their hands. A year, however, having passed without anything being done, and the money gradually disappearing, the medical staff of the Infirmary resolved to rouse public attention by making known the real state of matters. A meeting of the Medico-Chirurgical Society and of the profession generally was convened, and strong resolutions on the subject passed. A deputation was appointed to wait on the Lord Provost, who entered cordially into the views of the meeting. It is satisfactory to notice that the Provost has already pressed the matter strongly on the attention of the parochial boards, the Commission of Police who act as the Local Board of Health, and the managers of the Royal Infirmary. It is to be hoped that, should these bodies not take up the matter in earnest, but deal with it in true circumlocution style, by referring it to committees and sub-committees, to be ultimately shelved, his Lordship will convene a public meeting to afford an opportunity for the citizens to meet the emergency.

There is one point in connexion with this subject which has not been adverted to in the documents submitted to the boards, which bears practically on the *site* of the fever hospital: At present the airing-ground, which is only 200 yards square, situated between the General Infirmary and the fever-house, is common to convalescents from both; and it accords with the knowledge of your correspondent that this rendezvous of convalescents has in some instances been the means of spreading fever and small-pox amongst the ordinary patients. Nothing short of the erection of a suitable fever-hospital at a proper distance from the present building, with a sufficiency of open ground, will answer.

Whatever may be the result, the medical officers discharged their duty in the timely warning which they have given; and should this be neglected by the apathy of the local boards, the public will know at whose door the blame lies.

Aberdeen, January 4, 1868.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR OWN CORRESPONDENT.)

THE annual public meeting of the Academy of Medicine took place a few days ago with the usual accompaniments, and according to the customary programme of the ceremony. The lay public formed a very good share of the attendance; and many ladies had deigned to adorn the assembly with their presence. M. Dubois d'Amiens, the perpetual secretary, read a very able report (savouring strongly, say the critics, of the reigning spirit of *realism*) on the different memoirs which had been marked out for honours by the Academy; and, as usual, the interest of the day centred upon the delivery of a discourse by the annual secretary upon one of the departed celebrities of the learned body. M. Béclard—the talented official I have just named—had chosen M. Rostan as the subject of this year's *éloge*; and it is but justice to say that he treated the memory of his friend and master with exquisite tact and delicacy. M. Béclard, as a writer and an orator, is most remarkable for propriety of thought and of expression; and those qualities are admirably exemplified in his last production. If it has not the depth and originality of his preceding discourse on Gerdy, it is a model of elegant expression and graceful feeling. Naturally, a biographer, either through some fine artifice or a natural tendency, assumes something of the spirit and the style of the hero of whom he treats; and the rough, impulsive, eccentric genius of Gerdy could not have been painted in the same colours as the amiable and refined nature of Rostan.

M. Dubois d'Amiens, at the end of his report, announced the questions which the Academy has fixed upon to become the subject of its prize memoirs for next year; and I subjoin the titles, if only because they indicate the points upon which the learned body seem desirous of eliciting the researches of workers. 1. "On Sanguineous Effusions in the depth of Tissues." 2. "On the Tumours of the Brain and of their Symptoms." 3. "On the Psychological Phenomena which precede, attend, and follow Provoked Anæsthesia." 4. "On the Treatment of Uterine Affections by means of Mineral Waters." 5. "On Digitalis and Digitalin."

Before leaving the subject of the Academy of Medicine, I may just mention that M. Ricord, who has been Vice-President during last year, naturally steps into the Presidency; while M. Blache, a gentleman who enjoys the reputation of a consummate physician, and who has made for himself a great name in the treatment of diseases of children, while he is universally loved and esteemed on account of the uprightness and amenity of his character—M. Blache, I say, has been unanimously elected to the Vice-Presidency, and will therefore succeed M. Ricord.

It has often been said that the French are much behind the English and our Transatlantic cousins in the matter of therapeutical knowledge and research, and frequent examples seem to confirm the saying. For instance, it is already long since the Americans used the veratrum viride as a hyposthenic, while experiments are only now being made here in a methodical way to test its virtues. M. Oulmont, one of the hospital physicians of Paris, has been performing a series of comparative experiments, *in animâ vili, videlicet* dogs, with the veratrum viride, the veratrum album, and veratrin; and the results obtained show that the veratrum viride and the veratrum album have an analogous action, which is more especially to produce a powerful hyposthenic influence. Circulation and respiration are weakened, and the power of producing heat is abated, consequently both of the substances may be of great help in inflammatory diseases. A curious result of Mr. Oulmont's experiments was the demonstration that veratrin, or the substance known as such, is not the active principle of veratrum. Mr. Oulmont adds that he has tried the veratrum viride with satisfactory effect in pneumonia.

The local journals have recently published some interesting cases of intestinal obstruction. In one case recorded by M. Calvo, a child, who had been suddenly frightened by one of his companions, swallowed a cross which he held in his mouth. An emetic had been administered with no effect, when M. Calvo was called in. After several useless attempts to extract the foreign body by means of Demarquay's pincers, he recurred to De Graefe's pincers, and soon brought up the troublesome body very nicely and safely. In another case related by M. Krishaber, in the *Union Médicale*, a boy of 12 years had died from an intestinal obstruction, occasioned by a plum-stone or a small quantity of grape-seeds, not exceeding the size of a nut. The details of the case are very interesting. Besides the usual phenomena which attend intestinal obstructions, there were curious epileptiform seizures. M. Krishaber insists on the utility of bringing the peristaltic movements of the intestines into play, and he advocates the employment of electricity for the purpose. In a third case observed by M. Meynet, and of which the *Journal de Médecine de Lyons* gives full details, four hundred cherry-stones were found in the intestines. Yet the disease had lasted during six years, there had been no vomiting, and the symptoms were those of chronic enteritis. A careful perusal of the last two cases conveys the moral, that it is often very difficult to diagnosticate an intestinal obstruction, that great care should be observed in the diagnosis of obscure cases, and that many cases in which death occurred might have terminated favourably if the correct diagnosis had been formed from the first.

M. Christot has published a statistical table showing the results of five cases of ovariotomy performed by M. Desgranges, the able surgeon of the Hôtel Dieu of Lyons. In the last of these cases, which terminated successfully, there was a trilocular cyst of the right ovary, with cystic walls, forming a solid mass, which contained twelve litres of an intensely albuminous fluid. M. Desgranges did not employ the clamp, and substituted a tight ligature with a large pin stuck through the pedicle. The patient was completely cured in twenty-three days. The results of M. Desgranges' five operations may be summed up thus—death in two, cure in three. In the two successful cases (the above-mentioned details apply to the third), the cyst was bilocular; the cure was established at the end of thirty-four days in one case, and twenty-eight in the other. In the two fatal cases, in one instance death supervened on peritonitis; and in the other came on gradually through the failing strength of the patient.

At the last meeting of the Academy of Sciences, M. Wurtz, the Dean of the School of Medicine, made an announcement the purport of which was that he had been enabled, by means of various chemical experiments, to reproduce in its entity one of the most curious substances of organic chemistry, which he called *neurin*. It constitutes a most energetic basis; and, combined with phosphoglyceric acid, forms a body to which the name of *protagon* has been given by M. Oscar Liebreich. The protagon itself, which this chemist has extracted from the brain, is a definite body, capable of being crystallized, and containing phosphorus and azote in the number of its elements.

The *Mouvement Médical* gives the information that a special journal will shortly appear here under the title of "Archives of Normal and Pathological Physiology." The first number will be published in the beginning of January, by Victor Masson. This journal will be managed by such distinguished physiologists as MM. Brown-Séquard, Charcot, Vulpian, &c.

On account of the recent changes brought on in the surgical service of the hospitals of Paris through the death of Velpeau and Foucher, and the resignation of M. Nélaton, the following changes in the staffs attached to these institutions will take place on the 1st of January next:—M. Voillemeir will pass from La Pitié to the Hôtel Dieu; M. Broca, from St. Antoine to La Pitié; M. Dolbeau, from Cochin to Beaujon; M. Lefort, from Le Midi to Cochin; M. Panas, from Le Midi to St. Antoine; M. Tillaux, from Bicêtre to St. Antoine; M. Labbé, from La Salpétrière to Le Midi; M. Liégois, from Lourcine to Le Midi; M. Poan, from Les Enfans Assistés to Salpétrière; lastly, MM. Guéniot, Marc Sée, and Cruveilhier fils, surgeon of the Bureau Central, go respectively to Lourcine, Bicêtre, and Les Enfans Assistés.

Paris, Jan. 6th, 1868.

Obituary.

WILLIAM EMMANUEL PAGE, M.D. OXON., F.R.C.P.

WE chronicle with great regret the death of Dr. Page, which took place at his residence, 106, Gloucester-place, about midnight on January the 2nd, 1868. The deceased physician was the second son of the Rev. William Page, D.D., formerly Head Master of Westminster School. He was born on the 9th of April, 1808, and received his early education at Westminster School. He became a student of Christ Church, Oxford, in 1826, graduated B.A. in 1830, M.A. in 1833, M.B. in 1834, and M.D. in 1837. Having studied medicine at the school of St. George's, he became subsequently attached to that institution as assistant-physician, a post he held from June the 4th, 1841, to December the 19th, 1845, when he received the appointment of physician. The late Dr. Page married, on the

6th of August, 1856, Julia Katherine, daughter of the late Mr. Robert Keate, Serjeant-surgeon to the Queen. He deservedly occupied a prominent place amongst the Fellows of the Royal College of Physicians, and was appointed treasurer to that body last year, on the elevation of Dr. Alderson to the presidential chair. Upon the resignation, very recently, by the deceased, of his office of Senior Physician to St. George's Hospital, a special Board was summoned to elect him consulting physician; but he died before the Board met. The strongest testimony to the high esteem in which the late Dr. Page was held may be found in the highly complimentary resolution which was passed, expressive of the great regret for his loss, and of sympathy with his friends. The deceased gentleman was Lecturer on the Theory and Practice of Medicine at St. George's Hospital for some time; and held the post of Physician to the Economic and Clergy Mutual Assurance Societies.

FREDERICK SALMON, ESQ., M.R.C.S., &c.

THIS gentleman died on the 3rd instant, in the seventy-second year of his age. He was born in Bath, and received his preliminary professional education there at a time when diseases of the rectum were in great vogue; hence, perhaps, the turn given to him in after-life to this branch of surgery. He was educated at St. Bartholomew's Hospital, and became member of the College in 1818. In 1827, he was elected surgeon to the General Dispensary, Aldersgate, but resigned in 1832, in conjunction with Dr. Clutterbuck and others, on account of the Committee of that institution allowing votes to be made within a day or two of the election of any medical officer. Soon after this, Mr. Salmon started an Infirmary for Fistula and other Diseases of the Rectum. This step met with great professional opposition; but by indomitable perseverance, obtaining large funds from the public for the support of the institution, he ultimately succeeded in establishing the hospital now known as St. Mark's. Mr. Salmon had a large share of private practice in the diseases which he made his especial study, which about ten years ago ill-health compelled him to relinquish, and to leave London. He was the author of a work on "Diseases of the Rectum," and published some lectures on these diseases in THE LANCET.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates passed the preliminary examination for the Fellowship or Membership of the College on Dec. 17th, 18th, and 19th:—

Messrs. Amsden, Bullock, Craig, Champneys, Cooke, Duke, Furnivall, Farrant, Hardman, Kemp, Lewtas, M'Kellar, Madden, Pritchard, Pearse, Parker, Pollock, Rigg, Robinson, Spicer, Younger.

On the same days the following gentlemen passed the preliminary examination for the Membership:—

Messrs. Burgess, Bryan, Bethell, Blackburn, Beardsley, Barrett, Bishop, Crouch, Cobban, Corbin, Cheesewright, A. W. F. Carter, Corrie, Cartwright, Clyma, Chicken, A. Carter, De Lisle, Dunstan, Eberle, Eddowes, Elliott, Farrar, Greaves, Godding, Graham, Guinness, Hawthorn, Holmested, Harris, Hewett, Hepburn, Haslam, James, Jeakes, Knott, Lewis, Lush, Lupton, Lawson, Lawrence, Lyster, Lovett, Low, Lee, Lingard, Moxon, M'Cullum, H. W. Macord, Mears, Molyneux, May, Macintosh, R. J. Macord, Mounster, Newnham, Nelson, Odling, Philliott, Richard, Price, Powell, Patterson, Prichard, Robinson, Rogers, Ryott, H. W. Roberts, E. Roberts, Ramsden, Stowell, Smith, Sobey, Skipworth, Stone, Sylvester, Sealy, Snell, Tribe, Wade, Wood, Wheeler, Wilkins, Wright.

One candidate for the Fellowship and seventy-four for the Membership failed to acquit themselves to the satisfaction of the Court.

APOTHECARIES' HALL.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 2nd inst.:—

Sansome, Thomas, Hill-top, West Bromwich.

The following gentleman also on the same day passed his first examination:—

Bartlett, James, Charing-cross Hospital.

CLINICAL SOCIETY OF LONDON.—First meeting, Friday, 10th January, at half-past eight, at 53 Berners-street. President's Address; Resection of Shoulder; Exophthalmic Goitre; Ulcers of Cornea; Rheumatic Fever; Femoral Aneurism; Intermittent Hæmaturia; Renal Abscess; Fibrous Phthisis.

PRIZES FOR 1869 OFFERED BY THE ACADEMY OF MEDICINE OF PARIS.—1. On the Diseases of the Cerebellum, £40. 2. On Sclerosis in the Different Organs, £24. 3. Clinical History of Insanity with Fancied High Rank, especially in a Therapeutical point of view, £40. 4. On the Return of the Uterus to the ordinary state after confinement, with medico-legal deductions as to the time since which a woman has been delivered.

EDINBURGH UNIVERSITY.—James H. Stirling, Esq., M.D., LL.D. Edin., author of "The Secret of Hegel," and translator of "Schwegler's History of Philosophy," is candidate for the chair of Moral Philosophy, now vacant in the University by the lamented death of Professor Macdougall.

PROFESSOR HUXLEY delivered the "inaugural address" on Saturday, at the opening of a working men's college in South London, which has been formed on the model of the institution in Great Ormond-street, originated by Mr. Maurice. The topic of the address was education, and the learned professor spoke in anything but respectful terms of the popular theories on the subject.

LUNACY IN ESSEX.—One of the most painful subjects coming under the consideration of the Essex Quarter Sessions this month has been the constant increase in the number of patients in the County Lunatic Asylum. Thus, at the close of 1867, the number of patients in the asylum was 587, as compared with 573 at the close of 1866, 544 at the close of 1865, 550 at the close of 1864, 521 at the close of 1863, 498 at the close of 1862, and 467 at the close of 1861. It is satisfactory to note that 101 patients under treatment recovered their reason last year.

MUNIFICENT GIFT TO THE TOWN OF BOLTON.—Dr. Chadwick, of Southport, and formerly of Bolton, has intimated, through his solicitor, his intention to give £10,000, to be appropriated to the erection of working men's model dwellings in different parts of Bolton, to stimulate the erection of a better class of houses. In addition, he offers to erect an orphanage, and the rents of the model dwellings are to be devoted to the maintenance of the institution.—*Manchester Courier.*

WHOLESALE SALIVATION.—An extraordinary state of things was brought to light at an inquest held very lately at Preston, on the body of an inmate of the Walton-le-Dale workhouse. It seems that the chief official, anxious to make the boys clean for the inspection of visitors, rubbed into the heads of some eighty or ninety a quantity—it is said half a tablespoonful,—of "blue" (mercurial) ointment, which he got from a pot in the surgery. Next day they were all ill, but it was not until one of them died that the doctor was informed of what had been done.

AT the monthly meeting of the committee of the Queen's Hospital, Birmingham, held on Friday week, the Rev. Dr. Wilkinson in the chair, the weekly board reported that the general working, management, and efficiency of the institution during the past year had been such as they hoped would meet with the approval of the governors.

MEDICAL VACANCIES.

Islington Dispensary—Surgeon, vice Mr. Bruce, resigned.
Royal South London Dispensary—District Surgeon.
West London Hospital—Assistant-Physician, vice Dr. Maudsley.

MEDICAL APPOINTMENTS.

S. F. BAGNALL, L.R.C.P.L., late Junior House-Surgeon to the Ardwick and Ancoats Dispensary, Manchester, has been appointed Junior House-Surgeon to the Royal Infirmary, Dispensary, and Lunatic Hospital, Manchester, vice Fennell, appointed Senior House-Surgeon.

C. G. BOTT, M.R.C.S.E., has been appointed Medical Officer for the Aveley District of the Orsett Union, Essex, vice W. F. Vidal, M.R.C.S.E., resigned.

C. F. BULLMORE, M.R.C.S.E., has been reappointed Medical Officer and Public Vaccinator for District No. 3 of the Helston Union, Cornwall.

A. CLARKE, L.K.Q.C.P.I., has been appointed Medical Officer for the Tempo Dispensary District of the Enniskillen Union, Co. Fermanagh, vice T. E. Skelton, L.R.C.S.I., deceased.

H. COLLINS, M.D., has been appointed Certifying Surgeon under the provisions of the Factory Acts for the Districts of Bilston and Moxley.

W. T. COLMAN, M.R.C.S.E., late House-Surgeon and Head Accoucheur at the London Hospital, has been appointed Resident House-Surgeon to the Brighton and Hove Lying-in Institution, vice F. W. Salsmann, M.R.C.S.E., resigned.

E. F. DEHANN, F.R.C.S.E., has been appointed Certifying Surgeon under the provisions of the Factory Acts for the District of Wolverhampton.

Dr. H. DONOVAN has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilfinane Dispensary District of the Kilmallock Union, Co. Limerick, vice G. Burke, M.D., resigned.

T. PENNELL, M.R.C.S.E., Junior House-Surgeon at the Royal Infirmary, Dispensary, and Lunatic Hospital, Manchester, has been appointed Senior House-Surgeon, vice J. R. Woodcock, M.R.C.S.E., resigned.

D. ILES, M.R.C.S.E., has been appointed Visiting Surgeon to the Croft House Asylum, Fairford.

Dr. D. MACLACHLAN MACLURE has been appointed Lecturer on Physiology at the Westminster Hospital School of Medicine, vice Dr. H. Power, who has resigned in consequence of his appointment to the office of Ophthalmic Surgeon at St. George's Hospital.

J. MACNAMARA, M.R.C.S.E., has been appointed Medical Officer for District No. 2 of the Mansfield Union, Nottinghamshire, vice W. Whitehead, F.R.C.S.Ed., resigned.

Mr. PEACOCK has been appointed Apothecary and Assistant-Secretary to the West London Hospital, Hammersmith, vice Mr. H. Irving.

R. RISDON, M.R.C.S.E., has been appointed Surgeon-Dentist to the Victoria Hospital for Sick Children, Queen's-road, Chelsea, vice T. Edgelow, L.R.C.P.L., resigned.

T. SANSOME, M.R.C.S.E., has been appointed Medical Officer, *pro tem.*, for the West Bromwich North-East District of the West Bromwich Union, Staffordshire, vice C. T. Male, M.R.C.S.E., deceased.

J. SAWYER, M.B., has been appointed Resident Physician to the Queen's Hospital, Birmingham, vice T. Wright, M.D., resigned.

T. TATUM, F.R.C.S.E., has been appointed Consulting Surgeon to St. George's Hospital, on resigning as Surgeon.

T. S. USHER, M.D., has been appointed Medical Officer for the Middle District of the Patrington Union, Yorkshire.

W. G. WILLIAMS, M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Alderbury Union, Wilts, vice J. Winzar, M.R.C.S.E., resigned.

MILITARY AND NAVAL MEDICAL APPOINTMENTS.

G. ASHTON, M.B., Assist.-Surgeon 102nd Foot, has been appointed Staff Assist.-Surgeon, vice Kirkwood, appointed to the 102nd Foot.

G. ATKINSON, M.B., Staff Assist.-Surgeon Army, has been appointed Assist.-Surgeon 19th Foot, vice Wikeley, appointed to the Staff.

W. A. BYRNE, M.R.C.S.E., has been appointed Assist.-Surgeon 2nd Administrative Batt. of Glamorganshire Rifle Volunteers.

W. CRAWFORD, L.R.C.S.Ed., Surgeon R.N., has been appointed to the "Revenge."

Assist.-Surg. H. C. CUTCLIFFE, F.R.C.S., Officiating Civil Assist.-Surgeon of Saharunpore, has been appointed to the Medical Charge of the Camp of his Honour the Lieut.-Governor, North-Western Provinces, on its formation in Roorkee on the 1st of November last.

F. DOUGLAS, M.D., Surgeon 10th Foot, has been appointed Staff Surgeon, vice Slaughter, appointed to the 10th Foot.

A. DURHAM, M.D., Surg.-Major Bombay Establishment, has been promoted to the honorary rank of Deputy Inspector-General of Hospitals on retiring upon half-pay.

Assist.-Surg. J. INCE, M.D., attached to the 2nd Punjab Cavalry, has been appointed to the Medical Charge of the Camp of the Hon. Lieutenant-Governor, with effect from Oct. 30th, 1867.

T. M. KIRKWOOD, L.R.C.P.Ed., Staff Assist.-Surgeon Army, has been appointed Assistant-Surgeon 102nd Foot, vice Ashton, appointed to the Staff.

R. MILES, L.R.C.P.Ed., has been appointed Assist.-Surgeon 2nd Administrative Batt. of Glamorganshire Rifle Volunteers.

H. J. PAINE, M.D., has been appointed Surgeon 2nd Administrative Batt. of Glamorganshire Rifle Volunteers.

G. M. SLAUGHTER, L.R.C.P.L., Staff Surgeon Army, has been appointed Surgeon 10th Foot, vice Douglas, appointed to the Staff.

C. E. WIKELEY, M.R.C.S.E., Assist.-Surgeon 19th Foot, has been appointed Staff Assist.-Surgeon, vice Atkinson, appointed to the 10th Foot.

Births, Marriages, and Deaths.

BIRTHS.

On the 29th ult., at Ablewall-street, Walsall, the wife of A. J. Harrison, M.B., of a daughter.

On the 1st inst., at Northumberland House, Stoke Newington, the wife of J. Thompson Sabben, M.D., of a daughter.

On the 1st inst., at St. John-street, Chester, the wife of Dr. John Roberts, of a son.

On the 2nd inst., at Carr House, Greenwich, near Alfreton, Derbyshire, the wife of George Daniel Harding, Esq., of a son.

On the 3rd inst., at Montague-street, Russell-square, the wife of W. Spencer Watson, F.R.C.S.E., of a daughter.

On the 5th inst., at Launceston, Cornwall, the wife of Stamford Felce, Esq., of a daughter.

On the 8th inst., at Pontypridd, the wife of Dr. Hunter, of a son.

MARRIAGES.

On the 2nd inst., at Llandissilio, Pembrokeshire, Richard James, M.R.C.S., of Clarendon-road, Notting-hill, to Annie, youngest daughter of the late Rev. T. Harries, Vicar of Llandissilio.

On the 7th inst., at St. George's, Hanover-square, Frederick Lucas, eldest son of Francis Cook, Esq., of Doughty House, Richmond, and Montserrat, Cintra, to Bessie, eldest daughter of Dr. Cotton, of Clarges-street, Piccadilly.—No Cards.

DEATHS.

On the 2nd ult., in London, Thomas Richardson, Surgeon Extraordinary to H.R.H. the Duke of Cambridge, aged 68.

On the 29th ult., Harriet Banks, the wife of P. H. Banks, Surgeon, of Riseley, Higham Ferrers, aged 41.

On the 2nd inst., at Markham-square, Chelsea, Ann, the wife of Martindale Ward, L.R.C.P.Ed., F.R.C.S.E., aged 53.

On the 2nd inst., at Ware, Dr. Henry Butcher, after a protracted illness, aged 60.

On the 3rd inst., Charles Ridley, M.R.C.S.E., of Charlotte-street, Bedford-square, aged 62.

ABSOLON *VERSUS* STATHAM.

The following additional subscriptions have been received:

Ash, Claudius, and Sons ...	£2	2	0	King, R. F. H., Esq.	£2	2	0
Atkinson, J. H., Esq., Leeds	1	1	0	Lindsay, J. B., Esq., Dover	1	1	0
Baker, J. A., Esq., Dublin .	2	2	0	Margetson, W., Esq., Dewsbury	1	1	0
Barrett, H. J., Esq.	2	2	0	Martin, Dr. J., Portsmouth	2	2	0
Bate, C. Spence, Esq., F.R.S.	1	1	0	Murchison, Dr. C., F.R.S....	1	1	0
Bowen, Dr. Essex	1	1	0	Palmer, J. E., Esq., Peterborough	1	1	0
Bowman, W., Esq., F.R.S....	3	3	0	Parkinson, E., Esq., Brighton	0	10	6
Brock, John, Esq.	0	10	6	Parrett, P. L., Esq., Douglas, Isle of Man	1	1	0
*Brown, Dr. A.	1	1	0	Powell, Dr. Josiah	1	1	0
Brookhouse, R., Esq., Manchester	1	1	0	Pretty, W., Esq.	0	10	6
Buchanan, G., Esq., Glasgow	1	1	0	Read, H. B., Esq.	1	1	0
Burger, Dr.	0	10	6	Reynolds, Dr.	1	1	0
Burrows, Dr., F.R.S.	2	2	0	Roberts, C. D., Esq., Ramsgate	1	1	0
Coles, S. J., Esq.	1	1	0	Rogers, T. A., Esq.	1	1	0
Cregeen, Dr....	0	10	6	Rogers, Henry, Esq.	1	1	0
De Méric, V., Esq.	1	1	0	Rogers, Josiah, Esq. (second donation)	0	10	6
Elliott, J. W., Esq.	2	2	0	Silicated Carbon Filter Company	1	1	0
Executive Committee of the Great Northern Hospital	10	10	0	Snape, J., Esq., Liverpool...	2	2	0
Franklyn, G. R., Esq.... ...	1	1	0	Spencer, H. L., Esq.	1	1	0
Gilbert, E. J., Esq.	1	1	0	Sutro, Dr.	2	2	0
Harrison, R. E., Esq., Hull	0	10	6	Turner, J. S., Esq.	1	1	0
Heath, F. W., Esq.	2	2	0	White, R., Esq., Norwich ...	1	1	0
Hirsch, Dr.	0	10	6				
Holt, Barnard, Esq.	2	2	0				
Johnson, Dr. George... ...	2	2	0				
Keeling, G. R., Esq.	1	1	0				

* This gentleman has promised more if needed.

Medical Diary of the Week.

Monday, Jan. 13.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 1½ P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Anniversary.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Lettsomian Lectures. Dr. Geo. Buchanan: "Tuberculous Disease of the Lungs in Children."

Tuesday, Jan. 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Thomas Smith, On the Cure of Cleft-Palate by Operation in Children."—Mr. Thomas Bryant, "On a Case of Colotomy for Vesico-Intestinal Fistula."

Wednesday, Jan. 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations, 2 P.M.

Thursday, Jan. 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Dr. Althaus, "On some Therapeutical Applications of Electricity and Galvanism."

Friday, Jan. 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Faraday as a Discoverer."

Saturday, Jan. 18.

ST. THOMAS'S HOSPITAL.—Operations, 8½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—7½ P.M.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page.....	£2	12	6
For every additional line.....	0	0	6	For a page.....	5	0	0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

To Correspondents.

THE NEW VACCINATION ACT.

Mr. Robert Platt.—Section 29 of the New Vaccination Act directs that a parent or guardian shall be liable to a penalty for neglecting to have a child vaccinated; but the section does not say who is to take proceedings. Section 28, however, authorises the guardians "to pay any officer appointed by them to prosecute persons charged with offences against the Act, or otherwise to enforce its provisions." Again, section 31 clearly authorises registrars to take proceedings, and it does not appear that these last-mentioned officials need be requested by the guardians to move, but that they may prosecute of their own accord. It would seem, however, that the taking proceedings or not would be a matter of discretion, as the section does not say *shall*. So that if a parent neglects to have a child vaccinated, and the registrar does not feel inclined to prosecute at once, it certainly is not made the duty of the medical practitioner to incur the trouble of procuring compliance with the law; neither do we see how he would recover his expenses, unless he were an officer appointed by the guardians, under section 28, to prosecute persons. The course which it appears to us would be the best one to pursue would be, in the case of a child whose birth has not been registered in the district, to call the attention of the officer appointed by the guardians to prosecute, or, if such an officer has not been appointed, the attention of the guardians or registrar, to the fact that there is in the district a child, more than three months old, but under fourteen years of age, who has not been vaccinated. The guardians, by their officer or the registrar, can then proceed under clause 31. And in the case of a child whose birth has been registered in the district, and who is more than three months old and has not been vaccinated, the taking proceedings would be provided for in section 27, which requires every registrar to send, in the first week in January and July in each year, to the guardians a list of the cases in which the certificates of vaccination have not been duly received by him. It then becomes the duty of the guardians forthwith to inquire into the circumstances of each case, and to cause such proceedings to be taken as shall be necessary; these proceedings may be either for neglect to have a child vaccinated, or for neglect on the part of the public vaccinator or parent to send the certificate required by the Act to be sent to the registrar. It will thus be seen that the *duty* of prosecuting is thrown upon the guardians alone—though it is open to the registrars and officers appointed by the guardians also to take proceedings,—for section 27 states that the guardians "*shall* cause proceedings to be taken against the persons in default;" while the other section (31), under which proceedings may be taken, merely states that if any registrar or officer appointed by the guardians to prosecute gives certain information, the Justice may summon the person informed against.

M.R.C.S.E., (Swindon.)—It is not according to the rules of professional etiquette for a surgeon to advertise "his great practical experience in his profession," or "his skilful treatment of his patients," in an almanack, or indeed in any other publication. Advertisements of this kind are very properly considered to be derogatory to our profession.

Fee should apply to the Consuls of Russia or Turkey for information.

"PRESCRIPTIONS CAREFULLY PREPARED."

To the Editor of THE LANCET.

SIR,—You do me injustice when you say that in replying to your charges of carelessness against dispensers in general, I rely "on the *tu quoque* style of argument." In the first place, your assertion that prescribers write so much more legibly now than they did formerly, was no charge against us, and I did not treat it as such, although unable to agree with you as to the improvement being almost universal. I distinctly disclaimed enlisting the absence of it in some cases as an excuse for inaccuracy on our part. As to giving any proof of the incorrectness of your observations on other matters, I submit that it was impossible for me to do so, so long as your charges were general.

Now you come to specific cases; and your first is one in which you say that in one of the most respectable houses in London the dispenser struck out the name of the special maker of pig's pepsine inserted by the prescriber, and substituted his own. I cannot admit this either as a proof of carelessness or ignorance, and I leave you, knowing all the circumstances, to class the act as you will; but having substituted his own preparation for that which was originally ordered, I think the dispenser did his best to insure uniformity in the mixture ever after, inasmuch as, according to my idea of pharmaceutical ethics, nine chemists out of ten would make a point of using the particular maker's pepsine indicated.

You next speak of the soft and hard ointments made with the oil of theobroma. I gave you the contents of the British Pharmacopœia for your purposes, and this oil was made officinal by the issue of that book during the present year. It is described as "a concrete oil obtained by expression and heat from the ground seeds of *Theobroma cacao*," and "of the consistency of tallow;" officinal name, "oleum theobromæ." You may not be aware that for many years an oil of cocoa-nut, *Cocos nucifera*, has been prescribed, erroneously I believe, under the name of "oleum cacao." It is tolerably hard in winter, very soft in summer, and requiring always a long time to harden after being rubbed into ointment. Did your prescriber use the word "theobroma" or "cacao"?

I can say nothing of your pill mass, as you do not name the ingredients to be incorporated by the glycerine; but this I must say that if you refuse any discretion to dispensers in making pills, your patients will often be sadly disappointed, sometimes dismayed, on opening their boxes. The pill is perhaps of all forms of medicine the one with the manipulation of which prescribers are least acquainted.

And now for the "pernicious practice of the dispenser using his discretion instead of doing as he is told." It is said that all the talent and skill of the physician culminate in his prescription. I submit that for the benefit of the patient you must go a step further; that if the physician's prescription is not accurately carried out by the dispenser, it might as well never have been written; and if you canvass the Fellows of the College, I feel assured you will find them all anxious that their medicines should be prepared by men who not only have, but also use the necessary discretion, *not in altering*, but in interpreting their instructions. I believe you and I are agreed as to the necessity for continually repeating directions for the administration of medicine, only you apparently assume that I want too much latitude. When I said regarding labels, "even this, however, is a question on which a dispenser must be allowed a certain discretion," I simply meant that in cases which occur to a dispenser almost daily, he finds the direction given as to the time of taking medicine, one or perhaps five years previously, utterly inapplicable to the present repetition, and then if he be a careful man he will write somewhat thus: "The mixture as before, a fourth part for a dose." Frequently one pill only is ordered, "to be taken immediately." When the patient chooses to have a dozen or two as a stock medicine, the first direction would be nonsense. Sometimes on a second visit a physician gives verbal instructions to increase or lessen the dose of a mixture. The patient tells all this to his chemist, and what can the label be then?

If you could spend your morning in your consulting-room and your afternoon in a dispensary, you would see both sides of the question.

I cannot agree with you that "the matter now in dispute" is not a question of education; because a man must be educated to know good drugs from bad, to know their value and their danger, the necessity for all care in their preparation, and in giving instructions for their use when prepared. Education may not make all men honest; but at least it gives them a pride in their profession, and so tends to make them act honestly, even if the motive be self-interest only.

And now, Sir, although I may differ from you as to the justice of your criticism, I heartily join you in wishing that it may do good in that field in which I trust I may still consider myself,

Your humble fellow-worker,

January, 1868. A PHARMACEUTICAL CHEMIST.

*** We feel certain that our correspondent reads the prescriptions entrusted to his charge with much more care than he studies our remarks. We thought we had expressed our opinion clearly, and yet the gist of the observations we made is entirely misunderstood. It is necessary, therefore, to say plainly: (1) That when the physician unmistakably orders one particular chemist's drug in his prescription, it is a most improper act for the dispenser to substitute a preparation by a different maker. It is not improving the matter to note the unwarrantable alteration on the prescription; for only children believe that by confession a fault is converted into a virtue. (2) As we said at first, so we repeat, that "oil of theobroma" was ordered. It is unnecessary to tell the readers of this journal about oil of cocoa-nut, and its conditions under different temperatures. The original prescription is before us. It is headed "Brit. Phar.," and the words "olei theobromæ" are as distinct as pen and ink and a practised hand can make them. The date is the 10th December, 1867. But supposing "oleum cacao" had been ordered, our argument would still stand, inasmuch as the complaint is that the *same* prescription taken to two different old-established chemists leads to the production of two *different* compounds. This remark applies equally to the pill mass. From the same receipt one chemist sends out small pills literally as hard as bullets, while another druggist supplies rather soft boluses. (3) The remarks of "A Pharmaceutical Chemist" on "the drops as before" are quite beside the question. Our complaint was specific, as can be seen by referring to this journal for the 14th December, 1867. (4) Our correspondent again shows the necessity for the original criticism. He simply urges the importance of doing what we complain is often not done: "If the physician's prescription is not accurately carried out by the dispenser, it might as well never have been written." Exactly our opinion. The sentence contains the whole pith of the matter. Whose fault, then, is it that the prescription "is not accurately carried out"? It is unnecessary to say more. All that we want an assurance of is this. Supposing a prescription to be distinctly and correctly written in every respect, will it be prepared alike, and will the medicine be directed as the prescriber has ordered by every respectable chemist into whose hands the receipt may fall? If our correspondent will use his great influence to ensure such a desirable result, both physicians and patients will be much indebted to him.

R. D. T.—1. No prosecution would be successfully instituted unless it could be shown that the certificate was a fraudulent one. If it could be proved that the certificate was false, the offender might be summoned before a magistrate for infringement of the Registration Act.—2. We have no public prosecutor in this country; the initiative, therefore, could be taken by any person, or if a sufficiently strong case be made out to the Registrar-General, it is possible he might institute proceedings.

Dr. W. Marcet's valuable paper on "Empyema" shall, if possible, appear next week.

THE CURRAGH "WRENS."

IT is rather amusing to see that precisely the same tactics of flat denial have been adopted with regard to the able and powerful reports of the *Pall Mall Gazette* on the state of the wretched women who haunt the purlieus of the Camp at the Curragh as have been employed over and over again against our own Workhouse Commissioners. There is not the shadow of a doubt, however, in any reasonable mind that the *Pall Mall Gazette* was right, and has done a great public service.

Mr. Roberts's (Carnarvon) request shall receive attention.

B.—The case is one for a magistrate. Such an offender richly merits punishment.

A Subscriber.—A L.R.C.P. Edin. and L.F.P.S. Glasgow is eligible for a Poor-law appointment in Ireland.

Visitor.—It is understood to include attendance for nine days.

AN INQUEST AT SNETTISHAM: ALLEGED NEGLECT.

AN important inquest was held at Snettisham last week on the body of a woman who had died immediately after delivery. It appeared in evidence that an unqualified practitioner, named Clarke, of Snettisham, had been in attendance on the woman for some considerable time, and being unable to deliver her, sent to Mr. Flockton, a surgeon in the town, to assist him. Mr. Flockton declined to meet Clarke, who in consequence retired, and Mr. Flockton immediately attended. Finding the case one of unusual difficulty, and requiring the administration of chloroform, Mr. Flockton sent to Hunstanton for Dr. Meller, who arrived at the expiration of two hours. The woman was placed under the influence of chloroform by Mr. Flockton, and Dr. Meller delivered her in a very short time. She survived the delivery about twenty minutes. The object of the inquiry was evidently to determine how far Mr. Flockton's conduct was open to censure in not immediately attending when Clarke sent for him, and delivering the woman with Clarke's assistance, instead of delaying the proceedings for upwards of two hours in order to obtain the aid of Dr. Meller. It should be stated that Dr. Meller had given his opinion at the inquest that if the woman had been delivered two hours before, her life might have been saved. There was evidently a strong feeling upon the part of the jury against Mr. Flockton, and they eventually returned the following verdict:—

"That deceased died in childbed; but the jury regret that Mr. Flockton did not make use of the services of Mr. Clarke, instead of delaying to send for another doctor from Hunstanton."

It is remarkable that no expression of opinion was given by the jury as to the conduct of Clarke in permitting the woman to be so long in labour before he applied for the assistance of a qualified practitioner. The case is a painful one, and we regret that Mr. Flockton allowed any feeling of professional etiquette to influence him in refusing his help when life was at stake. This is not a time to be punctilious on points of form or ceremony.

MEDICAL AIDE-MEMOIRE FOR INDIA.

To the Editor of THE LANCET.

SIR,—In a recent number of THE LANCET you made some valuable comments upon Dr. F. J. Mouat's projected aide-memoire for medical officers in their study of Indian diseases. Such a publication would, doubtless, be of great service, in addition to the very comprehensive course followed at the Army Medical School at Netley. And in connexion with this subject, I would suggest the introduction of *disease-spots* into the "relief map" modelled by Mr. C. Crigge. You may be aware that this map shows the respective elevations of different localities in India—from the Himalayahs inclusive to the southern extremity of the peninsula. The relative size of military stations is also shown, with the extent of the military force in each. Only two of these maps are at present in existence, one being at the India Office, and the other at Netley, where I recently had an opportunity of examining it. If localities obnoxious to classes of disease were indicated on this map, it would be complete. Such a map would be more than ever valuable for teaching, and, no doubt, when it is less expensive (it costs now £50), it will become more generally known and distributed. A similar map might be constructed, showing *disease-spots* over the entire surface of the globe.

I would suggest, further, that all medical officers landing in India should be located *for* a given time—say six months—at the Presidency town, and be attached to the principal hospital there, with a view to studying the diseases of the country and the native languages. It would be the wisest economy in the end. At present, owing, it is alleged, to the paucity of medical officers, an assistant-surgeon, almost immediately after his arrival, is ordered, it may be, hundreds of miles away to a remote station, where his services are urgently required; and shortly after his arrival there, the exigencies of the service possibly require his presence in another direction, at a point equally remote; and so on. This peripatetic life may continue for a year or two. Not only is the young medical officer put to considerable expense in these frequent journeys, but he is deprived of the opportunity of preparing for his examination in the languages (until he passes he cannot enjoy the increased rate of pay accorded to "passed men"), and he is required to treat diseases which he has never seen before, it may be at all, or at any rate not in their acute stages. I would earnestly advocate that every young assistant-surgeon, on first arrival in India, should be allowed the privilege of pursuing his studies, professional and lingual, in the way pointed out. The professional information he would acquire during this temporary absence from his duties would abundantly repay all concerned. It was formerly the practice for young medical officers (permit me to speak especially of Bengal, as I am best acquainted with that Presidency) to be attached on first arrival to the General Hospital at Calcutta. This practice has been discontinued. But a far better field for the study of tropical disease exists in the hospital of the Medical College. There is probably no wider sphere for the study of pathology in the world than is to be found in its wards. The ablest physicians and surgeons in India occupy chairs of various subjects which treat largely of tropical diseases, and from whom the young medical officer would acquire in a few months an amount of clinical instruction which would inspire him with confidence in the treatment of such diseases, and serve as a valuable basis for a superstructure of his own raising in after years. In a word, he would be *grounded* for his Indian career, and be made, as far as is possible in the short time, an efficient public servant. He would diagnose with comparative facility, and act with promptitude and determination.

I remain, Sir, yours faithfully,

Rochester, December 30th, 1867. SURGEON-MAJOR.

To the Editor of THE LANCET.

SIR,—In your issue for December 14th you drew attention to a suggestion of Dr. F. J. Mouat, to prepare an aide-memoire in the shape of a disease-chart of the whole of India. I doubt not that such a production would prove a great assistance to the means already employed in the completion of our army medical officers' education. You seem, however, to ignore the admirable teaching by practical courses, lectures, and clinical instruction now systematically carried out at the Army Medical School and Hospital at Netley. No man who has ever attended the hospital practice of that institution, though only for a few months, could say that the opportunities for studying most of the diseases of India were wanting, or that he was in no way more fitted to undertake the treatment of hospital diseases than he was before he had been there.

Your obedient servant,

December, 1867. UNITY.

THE STOURBRIDGE UNION AND THEIR MEDICAL OFFICERS.

THE surgeons of the Stourbridge Union a short time since applied to the Board of Guardians for an increase in their salary, an increase justly merited. The result was a very curious correspondence. The following copy of a resolution was forwarded to one of the surgeons by the Clerk of the Board:—

"The Board considered the application of the district medical officers for an increase of salary, and, having compared the same with the sums paid in the neighbouring unions, consider the present salaries a fair remuneration.

"Resolved,—That no increase be made therein; but the Board are willing to supply cod-liver oil and quinine in cases where the medical officers think it requisite, in the same manner as extras are now supplied."

The Clerk subsequently wrote to say:—

"Since my letter conveying the offer of the guardians to supply cod-liver oil and quinine for your acceptance, the relieving officers have in several instances received orders from medical officers for quinine without the Board being informed whether you coincide with the offer made, or any quantity being stated on the order. The Board would be glad to have your views upon the subject; and, if you consent to the arrangement, they consider it would be preferable for the relieving officers to procure the quinine from the nearest chemist, and that you should state on your prescription the quantity required to be added (by the chemist) to the medicine supplied by you to the pauper. The cod-liver oil is kept at the workhouse, and will be supplied on an order from the relieving officer on your recommendation, stating the quantity."

This naturally called forth an indignant rejoinder from one of the medical officers, in which he said he did not think an answer was required, seeing that cod-liver oil was already supplied by the Board; and the way it was now proposed to supply it was worse than useless, and cast a reflection upon the medical officers of the union. The writer added: "You cannot be serious in asking me, as I read it, if I accept your offer in lieu of an equitable increase of my salary." Hereupon the Clerk of the Board writes, and says: "The Board consents to your procuring the quinine, and charging the amount in your quarterly account, and they hope you will be able to do so at the wholesale price." Not a word of comment on the above proceedings is necessary.

Marachie.—We are not acquainted with the existence of any such appointments.

A sincere Hater of Dr. ———. As our correspondent is so much annoyed by having the filthy pamphlets forwarded to his house, we advise him to ask a police magistrate in open court for his advice upon the subject. The publicity given to the application by the press would be the means of rendering great service to society. The nuisance has become perfectly intolerable.

A Ten Years' Subscriber.—Yes, by courtesy.

Mr. George F. Hain.—The paper shall be inserted at an early date.

MATERNAL IMPRESSIONS.

To the Editor of THE LANCET.

SIR,—I have been struck by the case recorded by Mr. T. Smith, F.R.C.S., with much apparent precision, of a woman who had children born with deformed hands on two distinct occasions after she had shaken hands during her pregnancy with a man whose hand had been similarly mutilated.

I have in my mind Dr. W. Hunter's 2000 observations in regard to this very question; and although, of course, one affirmative instance upsets many negative ones, I cannot help asking whether the statement can be verified precisely by the narrator, or whether it has been derived from hearsay? At any rate it would be interesting—and if the tale is to pass current it is absolutely necessary—that the essential statements should be put upon a proper scientific basis.

Perhaps Mr. Smith will favour us with his authority for the very striking statement in question.

Your obedient servant,

London, December 30th, 1867. A. P. C.

WE regret that *An Early Bird* should have been disappointed. In future let the postman be the medium of communication. The hour of attendance for the Secretary is the same as that for the Clerks—viz., ten o'clock A.M. There ought certainly to be some responsible person to give information in the absence of the Secretary.

Dr. Pollock is thanked. The manuscript arrived only at the moment of going to press.

Mr. Wm. Heane.—We think he would be entitled to exemption under the 33th clause of the Medical Act; but it is somewhat doubtful whether a collector of income-tax comes under the category of either "corporate, parochial, ward, hundred, and township officers." If not, our correspondent may be compelled to serve.

Medicus.—1. Dr. Blane's Diary is published by Longmans. — 2. The price is 5*s.*—3. It contains, as an appendix, a translation of M. Le Jean's article on Abyssinia and its Monarch, from the *Revue des Deux Mondes*.

MEDICAL CERTIFICATES OF DEATH.

To the Editor of THE LANCET.

SIR,—In your impression of the 21st ultimo I noticed a paragraph, calling attention to the fact of "a medical practitioner refusing to give a certificate of death until his fees for attendance on the deceased had been paid." Your comments on the case are very fair, and I have no doubt more than 99 per cent. of the profession give the certificate without once raising that objection. But it would be well for such a one to know that, although he is not legally bound to give the certificate, he is legally bound to give not only the cause of death, but all the information necessary for registration (upon request) to the registrar, and sign the entry as "informant."

I am, Sir, your obedient servant,

January 1st, 1868. M. R.

RECRUITING FROM A MEDICAL POINT OF VIEW.

WE have received two letters from Militia Surgeons on the subject of the medical examination of recruits for the army. As far as we can see, their statements have been anticipated in the letter we have already published. The pith of the matter is this: The militia surgeons allege that they have an amount of experience in the examination of recruits as great as that possessed by regular army surgeons themselves, and that they are peculiarly fitted to undertake the duty. We agree with our correspondents that the present system is both unsatisfactory and unnecessarily expensive. The view, however, as it has been put before us, is this: As every recruit, before he can be passed into the army, must be examined and approved by an army surgeon, the State is sufficiently protected, and no harm can result by throwing the examination of recruits open to all practitioners alike. It has been thought by some that if members of our profession were aware of the latest advantages offered by the army, and interested in the matter, they have the power of doing much service to the State, and good to a considerable number of young men when thrown out of work.

M.D. can recover for medical attendance if there be no law of the University to which he belongs against it. Whether he can recover for medicine is doubtful.

A., (Newcastle.)—The "modes" of unprofessional advertising referred to are most objectionable; but the remedy for them is by no means clear.

A WORKHOUSE CRY.

Our building faces the East,
A prey to that pitiless blast;
But that "don't matter the least,"
We're dying off so fast.

What business have *we* to live?
As the Master said to-day,
Money runs thro' us as a sieve;
Our keep will never pay.

We're nought but charity brats,
A breed of workhouse rats,
A set of thieving scamps,
And houseless, vagabond tramps.

Better kill us, then, outright
Than torture us after this plan;
With too little clothing and food,
We die as fast as we can.

On earth we're but in the way;
We've nought to do but sigh,
That the world has no friend for us,
But there's one above in the sky.

And oh! to see the joy
Which lights up each careworn face
When the final pang is o'er,
And the grave a welcome place.

They say a change is at hand,
That charity is about,
That the gentlemen of the land
Have found our misery out.

They say a "Lancet" keen
Has opened out our sore,
Has shown where the foster 'n been,
And essayed to effect a cure;—

Has essayed to remove a *curse*
Which lies at our neighbour's door;
That curse will go home to roost
When the House knows *us* no more.

Then oh! that the day come fast
When a brother's hand and a brother's heart
Take from poverty's woe its sharpest smart,
And with Pity atone for the Past.

Cley, Norfolk, December, 1867. W. SUMPTER, M.D.

L. M.—The agent used, we believe, is chloroform. A work on the subject is published by Hardwicke, of Piccadilly, who would, no doubt, forward any query to the proper quarter.

SEVERAL of Mr. Saltiel's circulars have been forwarded to us by different correspondents. But Mr. Saltiel surely is *not* a member of the profession.

Dr. W. D., (Yorkshire.)—The letter has been forwarded as requested.

FEES FOR PARISH MIDWIFERY.

To the Editor of THE LANCET.

SIR,—Permit me to offer more than a "hint" to your correspondent of last week, Mr. Edwin S. Green. Here are facts, and "facts are stubborn things," and his case may be put within a nut-shell. If he will trouble himself to refer to "Archbold's Parish Officer" or "Glen's Consolidated Order" (article 183), he will see that neither the guardians nor Commissioners have power to reduce his fee of £2; that is, if law as well as justice go hand in hand. There is not a word said there about the *necessity* to call in another medical man, though it be so in case of capital operation, as in article 178 of the same Order.

I should expect, if fair means do not avail Mr. Green, any County Court would give him a verdict.

Lest your correspondent may not be able to see this article at once, I will transcribe it. It runs thus:—

"Art. 183.—Provided that in any special case in which great difficulty may have occurred in the 'delivery,' or long subsequent attendance in respect of some puerperal malady or affection may have been requisite, any district medical officer shall receive the sum of *two pounds*."

I remain, Sir, yours truly,
January, 1868. A FELLOW "PAUPER DOCTOR."

An Ambitious Assistant.—Our correspondent will be able to obtain all the information he seeks by applying by letter to the Secretary of the Apothecaries' Society, Apothecaries' Hall.

Mr. Charles Williams is thanked.

W. W. P., (Sutton.)—1. Two pounds per week for visits; one pound when the patient visits the surgeon. — 2. The Board of Guardians have the right of appointing public vaccinators.

ABSURDITIES IN GRADUATION.

To the Editor of THE LANCET.

SIR,—Let me point out to you the following absurd oath still retained in the University of Aberdeen, and to be taken as part of the ceremony in graduation for M.D. It needs no comment:—

"Ego, A—— B——, * * * * *, Religionem Christianam, quousque in Sancto Dei Verbo palam proponitur, publice profiteor," &c.

Yours obediently,
January 6th, 1868. L. M. A.

P.S.—I quote from the Medical Directory of this year.

L.S.A., (Guy's.)—By the regulations of the Poor-law Board, a medical officer is required to hold qualifications both in medicine and surgery. Under exceptional circumstances, a gentleman with a single qualification may be elected by the guardians, and if they could show good reasons for the course they had adopted, the Poor-law Board would most probably ratify the proceeding; but if no such reason could be given, the guardians would be compelled to elect a practitioner with a double qualification.

P. A.—Not any particular work.

Enquirer.—Jenner's discovery of the protective influence of vaccinia against small-pox was recognised by the State in 1802 by the voting, amongst other things, of sums of money to secure the supply of lymph. The Act to extend the practice of vaccination took effect from July, 1840. A second Act in June, 1841, provided for the payment of vaccination expenses out of the poor-rate. It was in 1853 that vaccination was made compulsory.

DEFECTS OF THE MEDICAL ACT.

To the Editor of THE LANCET.

SIR,—In my neighbourhood there is an *unqualified* man, who calls himself "Sargeon-Accoucheur," and has it on his door-plate. Would you kindly say if anything can be done to him? Is he liable under the Medical Act?

I am, Sir, yours, &c.,
January 6th, 1868. M.B.

*** The question has never yet been decided; but the assumption of the title by an unqualified practitioner certainly comes within the spirit, if not within the letter of the Medical Act. The offender might be summoned under the provisions of that Act, and this would at all events ventilate the subject.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Ranald Martin; Mr. Erichsen; Sir Henry Thompson; Dr. Lankester; Capt. Marryat, R.N.; Dr. Letheby; Mr. Gayer, Guildford; Dr. Henry Day, Stafford; Mr. Hening; Mr. Merryweather, Bayswater; Dr. H. Dunn; Dr. A. Carpenter, Croydon; Mr. R. Roberts, Carnarvon; Dr. Turner, Keith; Dr. Turnbull, Liverpool; Dr. Sawyer, Birmingham; Mr. Felce, Launceston; Mr. Berkeley Hill; Mr. Barrett, Grimstone; Mr. Harding, Greenwich, Derbyshire; Mr. Diver, Southsea; Dr. Compson, Stourbridge; Mr. J. Taylor, Chester; Dr. Beddoe, Clifton; Mr. Phillips, Sutton Bonnington, Leicestershire; Mr. Callender; Mr. Smith, Sleaford; Mr. Doring, Manchester; Dr. Grant; Mr. C. Drury; Mr. J. S. Paul; Mr. Daniel Isles, Sanford; Rev. C. W. Page; Mr. Tilden; Dr. Hunter, Pontypridd; Mr. Robinson, Plymouth; Mr. T. James, Monmouth; Mr. Hubbard; Mr. Crofts; Mr. Rooper; Dr. Heane, Cinderford; Mr. Armstrong; Mr. Lovegrove; Dr. Tylecote, Stone; Mr. Medcalf, Ware; Dr. Macaulay, Stafford; Mr. Sanders; Mr. Fairweather, Glasgow; Mr. Leeson; Dr. Peruzzi, Lago Romagnes; Dr. Battye; Mr. John Mackenzie; Dr. Kendrick; Mr. Poole; Mr. Parker; Dr. Gervis; Dr. Shortt, Madras; Mr. Dyce, Kotagherry; Dr. Ince, Shahpoor; Dr. Kraus, Vienna; Mr. Parr; Mr. Squire; Mr. H. Lawrence; Mr. Marris; Dr. Nile, Cockermouth; Dr. Thudichum; Dr. Liddard; Dr. Dale, Yarm; Dr. Campbell, Bonawe; Messrs. Fowke and Son, Byfield; Mr. C. P. Hardy; Dr. Eaton, Ancaster; Dr. Redwood, Rhymney; Mr. Malcolmson, Dublin; Mr. Story; Dr. Down, Earlswood; Mr. Lumley; Dr. Evans, Lampeter; Mr. Jackson; Mr. Jameson, Dursley; Mr. Altham, Settle; Mr. C. Williams; Mr. Pyline; Dr. Tylecote, Sandon; Mr. Rothwell, Bolton; Mr. Platt, Mold; Dr. O'Sullivan; Mr. G. Jozeau; Mr. J. Roberts; Mr. Armistead; Dr. Turner, Market Bosworth; Dr. Francis, Calcutta; Dr. Wolfe; Dr. Gaylor, Belper; Dr. Astley Cooper; Mr. Carter; Dr. Duke; Dr. Allan, Bonar Bridge; Mr. Faron; Mr. Walker; Mr. R. Richards; Mr. M'Conachy; Dr. Campbell, Machynlleth; Mr. James, Exeter; Dr. Thornton, Dewsbury; Messrs. Harvey and Reynolds, Leeds; Mr. Cresswell; Mr. C. Brown, Dorchester; Dr. Macrae; Mr. E. Mahoney; Mr. J. Laffere; Mr. F. Vacher; Dr. Andrew, East Soham; Mr. G. Cole; Dr. Quick; Mr. Boger; Mr. Branson; Mr. Little; Mr. Buckell; E. F. F.; M. A. B., Brighton; M.D.; L. M. A., Aberdeen; An Old Subscriber, Newcastle; L. M.; A Fellow Pauper Doctor; M.B. City-road; Constant Reader, Whitby; Undergraduate; A Ten Years' Subscriber; F. A.; M.R.C.S.E.; The Secretary of the South London Medico-Chirurgical Society; Mater; A.; An Ambitious Assistant; B. M., Bradford; &c. &c.

THE *Staffordshire Advertiser*, the *Midland Counties Herald*, the *Liverpool Albion*, the *Shoreditch Observer*, the *Oriental Mail*, the *Norfolk Chronicle*, the *Cambria Daily Leader*, the *Public Health*, the *City Press*, the *Staffordshire Sentinel*, the *Liverpool Mercury*, the *Lynn Advertiser*, and the *Gateshead Observer* have been received.

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